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(52) UK CL (Edition V):
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WO 2000/025876 A1 US 6004211 A
US 5746657 A

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(54) Abstract Title: Race betting system

(57) In order to allow a person remote from a race, such as a horse race, to bet on and view the race, there is disclosed an interactive race betting system comprising race data input means (including totalisator 112 and race course data centre 113) for providing data including an identification of at least one race and race data relating to runners in the race. The race data is stored in a race database 106. A processor 103 is provided for transmitting race data to a betting terminal in the form of PC 101 or telephone with screen 117. The PC 101 or telephone 117 can be used to input bet data including a selection of at least one race, a selection of at least one runner and an identification of the betting terminal. This bet data is stored in a bet data store 105. The betting terminal 101 or 117 may also be used to deliver a request for video. The processor is configured to only allow video to be transmitted to the terminal if the user of the terminal has bet on the race for which a video has been requested. Video can then be transmitted to the betting terminal from the video supplier 120 at the time that the race is run.

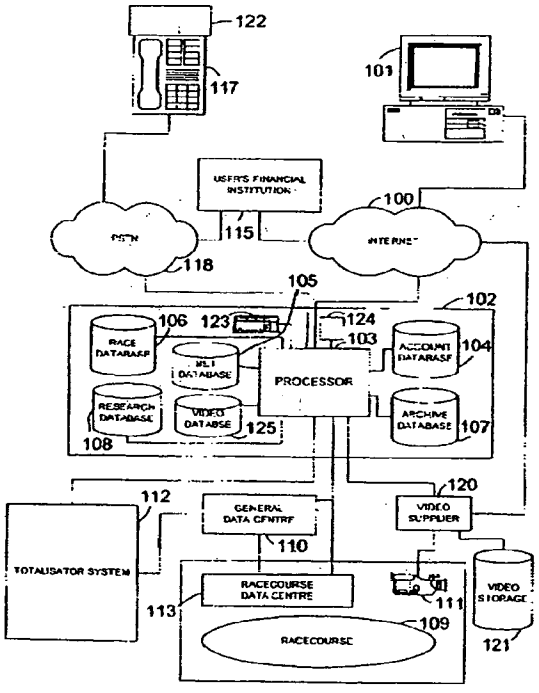

Fig. 1

GB 2 388 928 A

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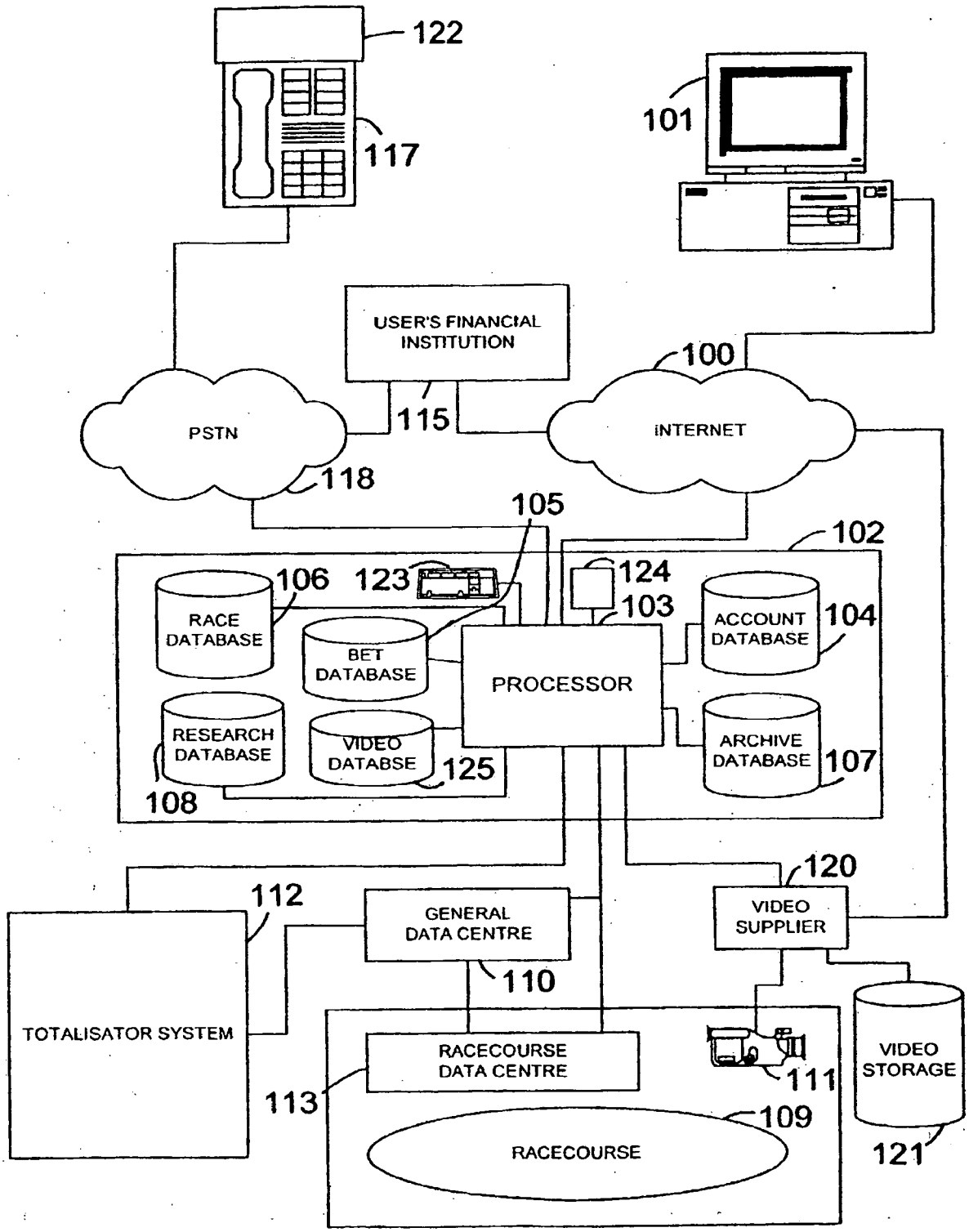
122
117
101
USER'S FINANCIAL INSTITUTION
100
PSTN
115
INTERNET
118
105
102
106
123
124
103
RACE DATABASE
BET DATABASE
PROCESSOR
ACCOUNT DATABASE
104
RESEARCH DATABASE
VIDEO DATABSE
125
ARCHIVE DATABASE
107
108
120
112
GENERAL DATA CENTRE
VIDEO SUPPLIER
110
TOTALISATOR SYSTEM
RACECOURSE DATA CENTRE
111
VIDEO STORAGE
113
109
RACECOURSE
121

Fig. 1

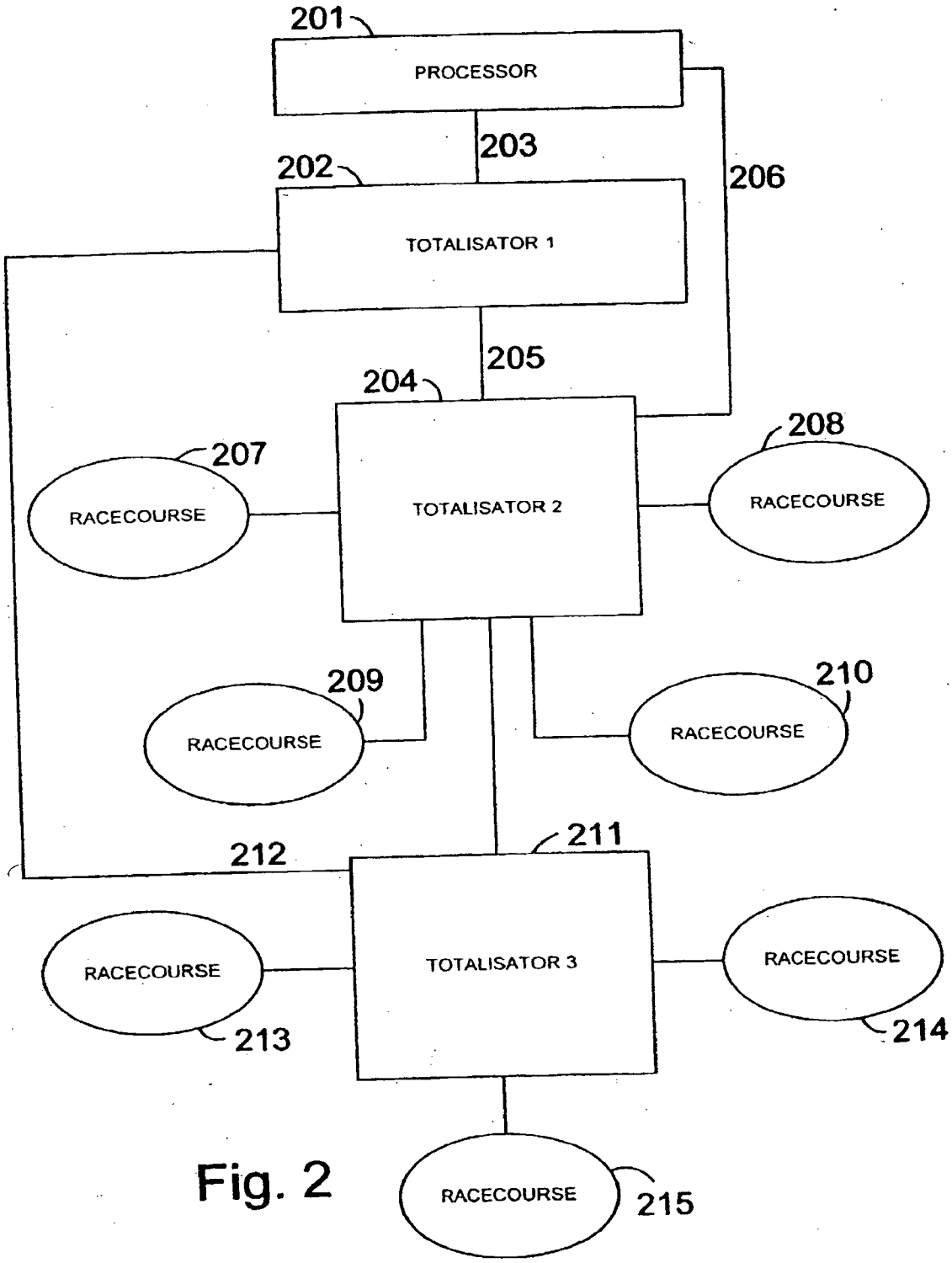
201
PROCESSOR
203
206
202
TOTALISATOR 1
205
204
208
207
RACECOURSE
TOTALISATOR 2
RACECOURSE
209
210
RACECOURSE
RACECOURSE
211
212
RACECOURSE
TOTALISATOR 3
RACECOURSE
213
214
RACECOURSE
215

Fig. 2

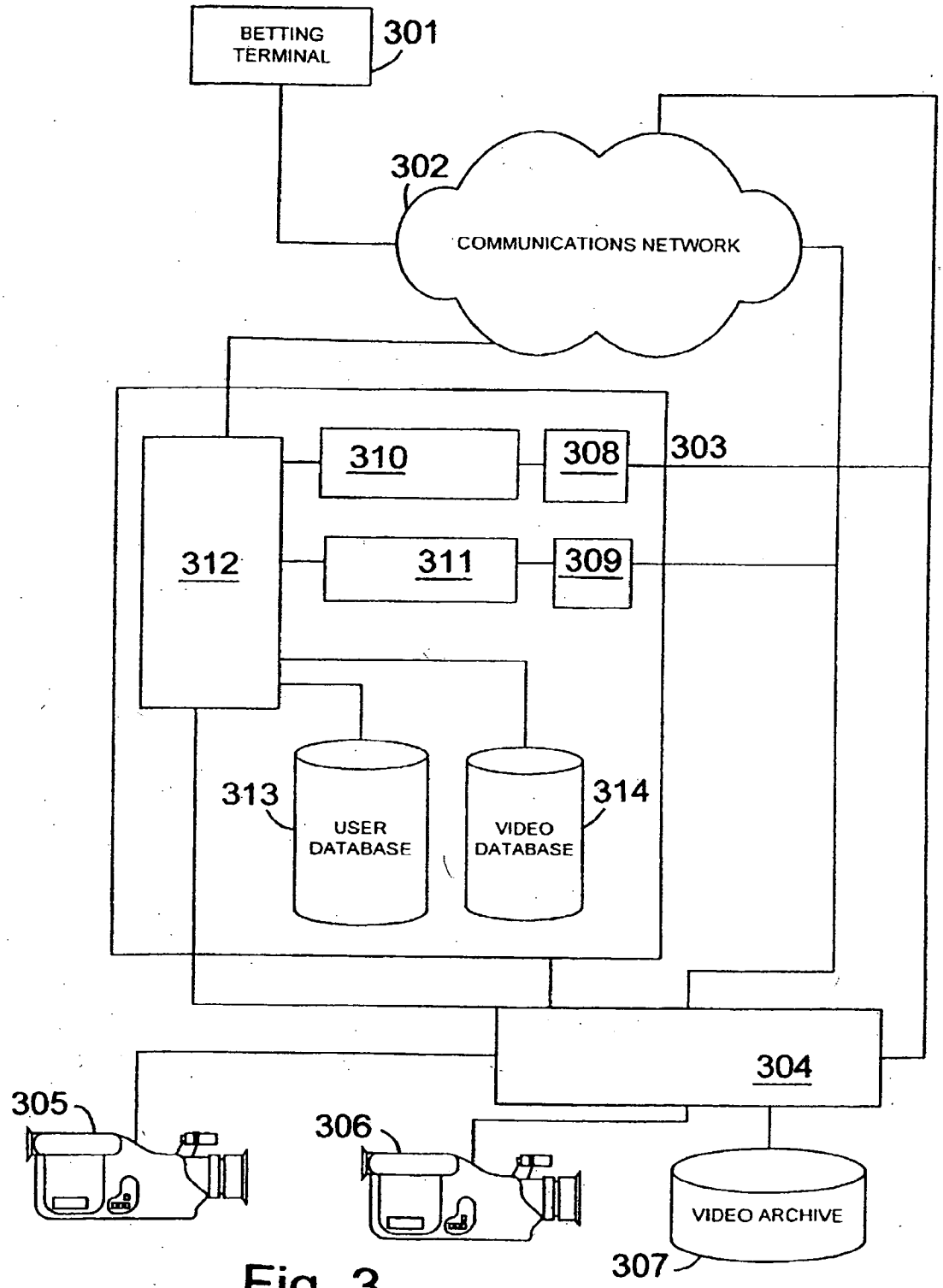
BETTING TERMINAL
301
302
COMMUNICATIONS NETWORK
303
310
308
312
311
309
313
USER DATABASE
VIDEO DATABASE
314
304
305
306
VIDEO ARCHIVE
307

Fig. 3

RACE DATABASE

LOCATION	RACE	RUNNERS	OTHER DATA
EPSOM	2.45PM	HORSE 1	
		HORSE 2	
		HORSE 3	
		HORSE 4	
	315 PM		

106

Fig. 4

USER 1	BETS PLACED		
	RACE	BET TYPE AND STAKE	HORSE(S) SELECTED (AND POSITIONS)
ACC NO, PASSWORD	EPSOM 2.45	WIN £10	HORSE 1
USER'S HORSE LIST: HORSE 1, HORSE 3			
VIDEO LICENCE: 1 MONTH	NEWARK 10.00 AM	EXACTA £10	HORSE 2, 1ST PLACE
			HORSE 1, 2ND PLACE

USER 2	BETS PLACED		
	RACE	BET TYPE AND STAKE	HORSE(S) SELECTED (AND POSITIONS)
ACC NO, PASSWORD	EPSOM 2.45	EXACTA £20	HORSE 1, 1ST PLACE
USER'S HORSE LIST: HORSE 2, HORSE 3			HORSE 3, 2ND PLACE
VIDEO LICENCE: 3 MONTHS			

USER 3	BETS PLACED		
	RACE	BET TYPE AND STAKE	HORSE(S) SELECTED (AND POSITIONS)
ACC NO, PASSWORD	EPSOM 2.45	WIN £10	HORSE 2
USER'S HORSE LIST: HORSE 1			
VIDEO LICENCE: 1 MONTH	EPSOM 3.15	WIN £10	HORSE 2

105

BET DATABASE

Fig. 5

USER, PASSWORD	ACCOUNT	CREDIT (DEBIT)	COMMENTS	TRANSACTION HISTORY
USER 1 USI/233	233121	£1.00	BANK ACCOUNT, ADDRESS, SPEND LIMIT.	21.11.01 Bet fee -£5.00
				1.12.01 Bet fee -£15.00
				1.12.01 Purchase -£1.00
				1.12.01 Winnings £24.00
				1.12.01 Video viewed -£2.00

104

ACCOUNT DATABASE

Fig. 6

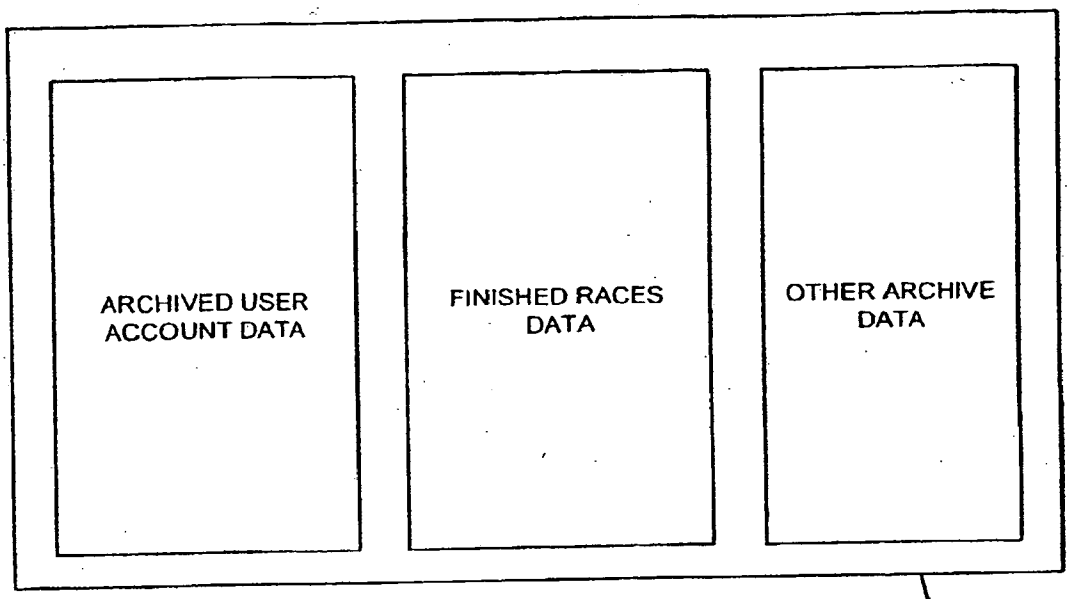
ARCHIVED USER ACCOUNT DATA
FINISHED RACES DATA
OTHER ARCHIVE DATA
ARCHIVE DATABASE
107

Fig. 7

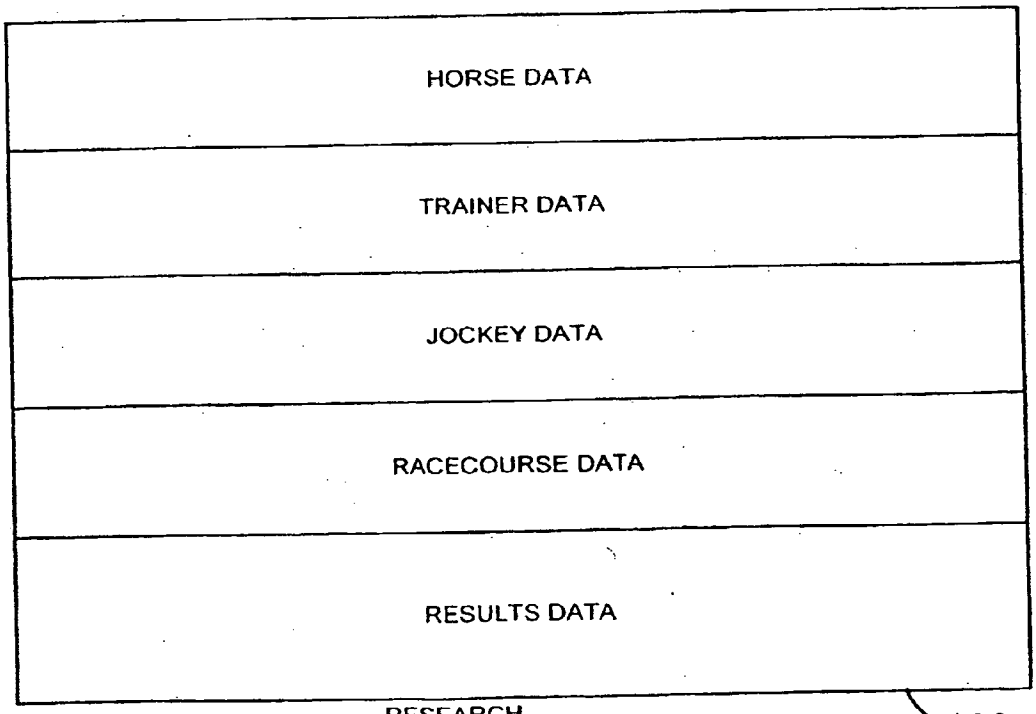
HORSE DATA
TRAINER DATA
JOCKEY DATA
RACECOURSE DATA
RESULTS DATA
RESEARCH DATABASE
108

Fig. 8

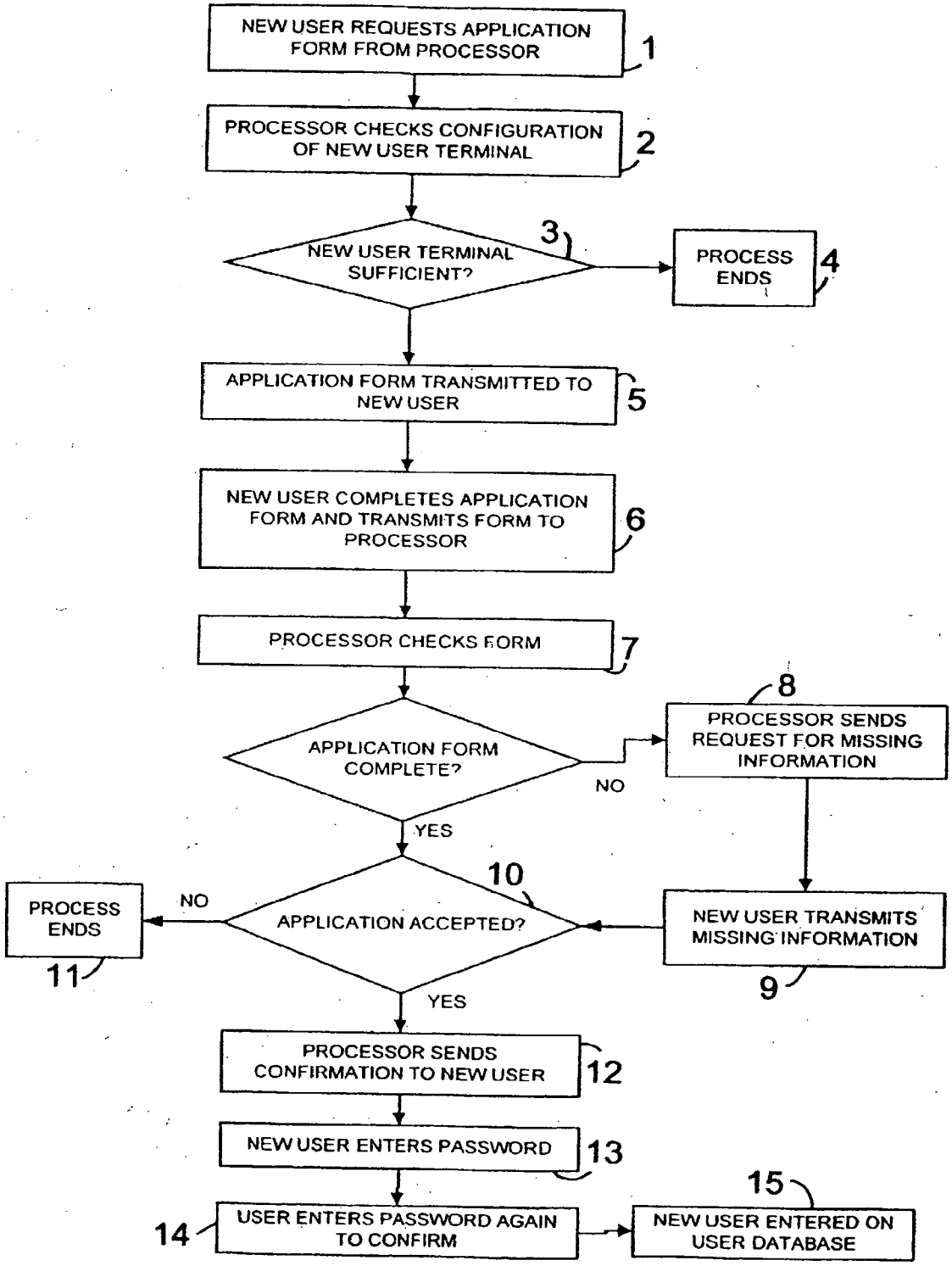
NEW USER REQUESTS APPLICATION FORM FROM PROCESSOR
1
PROCESSOR CHECKS CONFIGURATION OF NEW USER TERMINAL
2
NEW USER TERMINAL SUFFICIENT?
3
PROCESS ENDS
4
APPLICATION FORM TRANSMITTED TO NEW USER
5
NEW USER COMPLETES APPLICATION FORM AND TRANSMITS FORM TO PROCESSOR
6
PROCESSOR CHECKS FORM
7
APPLICATION FORM COMPLETE?
NO
8
PROCESSOR SENDS REQUEST FOR MISSING INFORMATION
YES
10
APPLICATION ACCEPTED?
NO
PROCESS ENDS
11
NEW USER TRANSMITS MISSING INFORMATION
9
YES
PROCESSOR SENDS CONFIRMATION TO NEW USER
12
NEW USER ENTERS PASSWORD
13
USER ENTERS PASSWORD AGAIN TO CONFIRM
14
15
NEW USER ENTERED ON USER DATABASE

Fig. 9

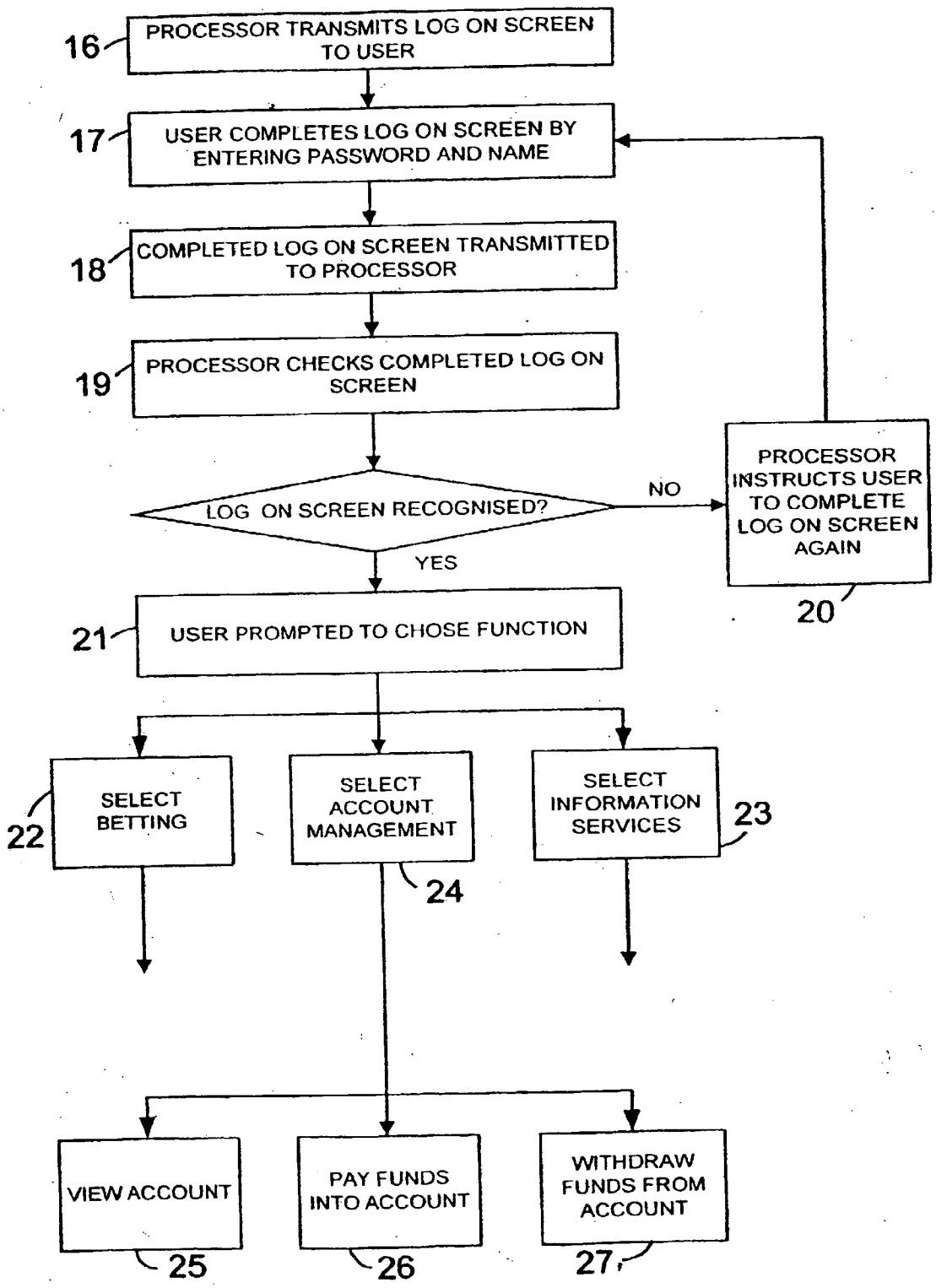
16
PROCESSOR TRANSMITS LOG ON SCREEN TO USER
17
USER COMPLETES LOG ON SCREEN BY ENTERING PASSWORD AND NAME
18
COMPLETED LOG ON SCREEN TRANSMITTED TO PROCESSOR
19
PROCESSOR CHECKS COMPLETED LOG ON SCREEN
LOG ON SCREEN RECOGNISED?
NO
PROCESSOR INSTRUCTS USER TO COMPLETE LOG ON SCREEN AGAIN
20
YES
21
USER PROMPTED TO CHOSE FUNCTION
22
SELECT BETTING
SELECT ACCOUNT MANAGEMENT
24
SELECT INFORMATION SERVICES
23
VIEW ACCOUNT
25
PAY FUNDS INTO ACCOUNT
26
WITHDRAW FUNDS FROM ACCOUNT
27

Fig. 10

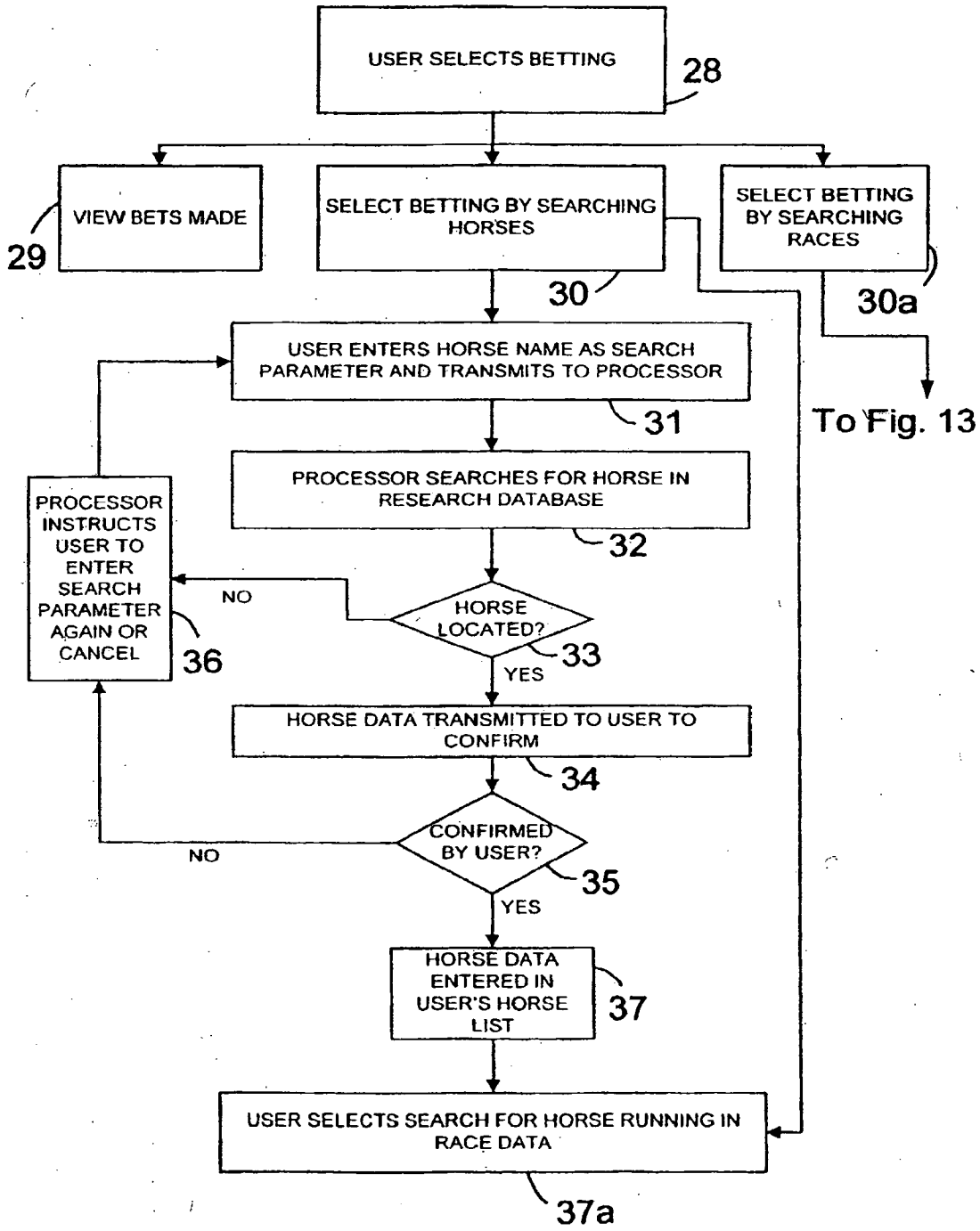
USER SELECTS BETTING
28
VIEW BETS MADE
29
SELECT BETTING BY SEARCHING HORSES
30
SELECT BETTING BY SEARCHING RACES
30a
To Fig. 13
USER ENTERS HORSE NAME AS SEARCH PARAMETER AND TRANSMITS TO PROCESSOR
31
PROCESSOR SEARCHES FOR HORSE IN RESEARCH DATABASE
32
HORSE LOCATED?
33
NO
YES
PROCESSOR INSTRUCTS USER TO ENTER SEARCH PARAMETER AGAIN OR CANCEL
36
HORSE DATA TRANSMITTED TO USER TO CONFIRM
34
CONFIRMED BY USER?
35
NO
YES
HORSE DATA ENTERED IN USER'S HORSE LIST
37
USER SELECTS SEARCH FOR HORSE RUNNING IN RACE DATA
37a

Fig. 11

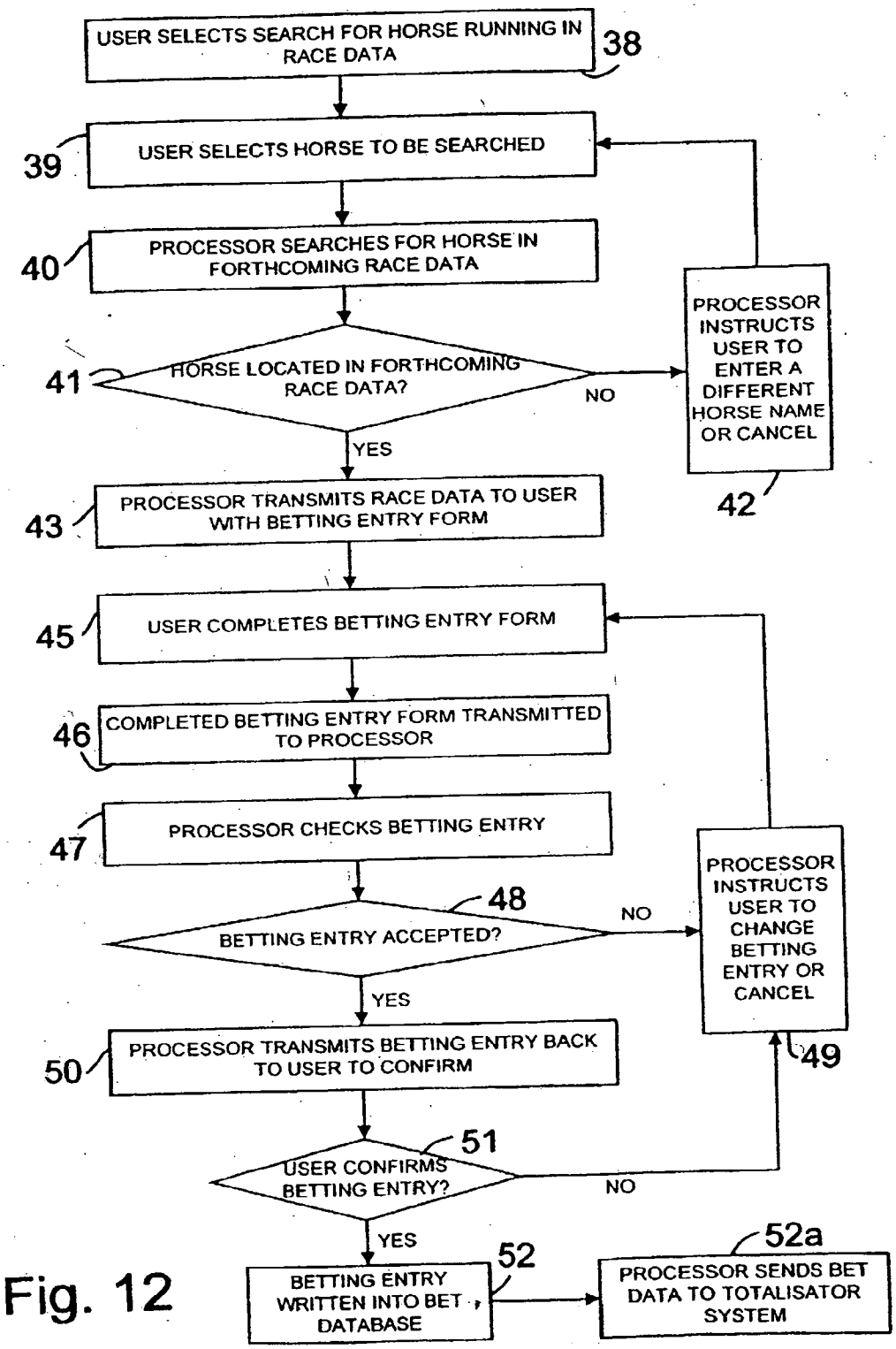
USER SELECTS SEARCH FOR HORSE RUNNING IN RACE DATA
38
USER SELECTS HORSE TO BE SEARCHED
39
PROCESSOR SEARCHES FOR HORSE IN FORTHCOMING RACE DATA
40
HORSE LOCATED IN FORTHCOMING RACE DATA?
41
NO
PROCESSOR INSTRUCTS USER TO ENTER A DIFFERENT HORSE NAME OR CANCEL
42
YES
PROCESSOR TRANSMITS RACE DATA TO USER WITH BETTING ENTRY FORM
43
USER COMPLETES BETTING ENTRY FORM
45
COMPLETED BETTING ENTRY FORM TRANSMITTED TO PROCESSOR
46
PROCESSOR CHECKS BETTING ENTRY
47
BETTING ENTRY ACCEPTED?
48
NO
PROCESSOR INSTRUCTS USER TO CHANGE BETTING ENTRY OR CANCEL
49
YES
PROCESSOR TRANSMITS BETTING ENTRY BACK TO USER TO CONFIRM
50
USER CONFIRMS BETTING ENTRY?
51
NO
YES
BETTING ENTRY WRITTEN INTO BET DATABASE
52
PROCESSOR SENDS BET DATA TO TOTALISATOR SYSTEM
52a

Fig. 12

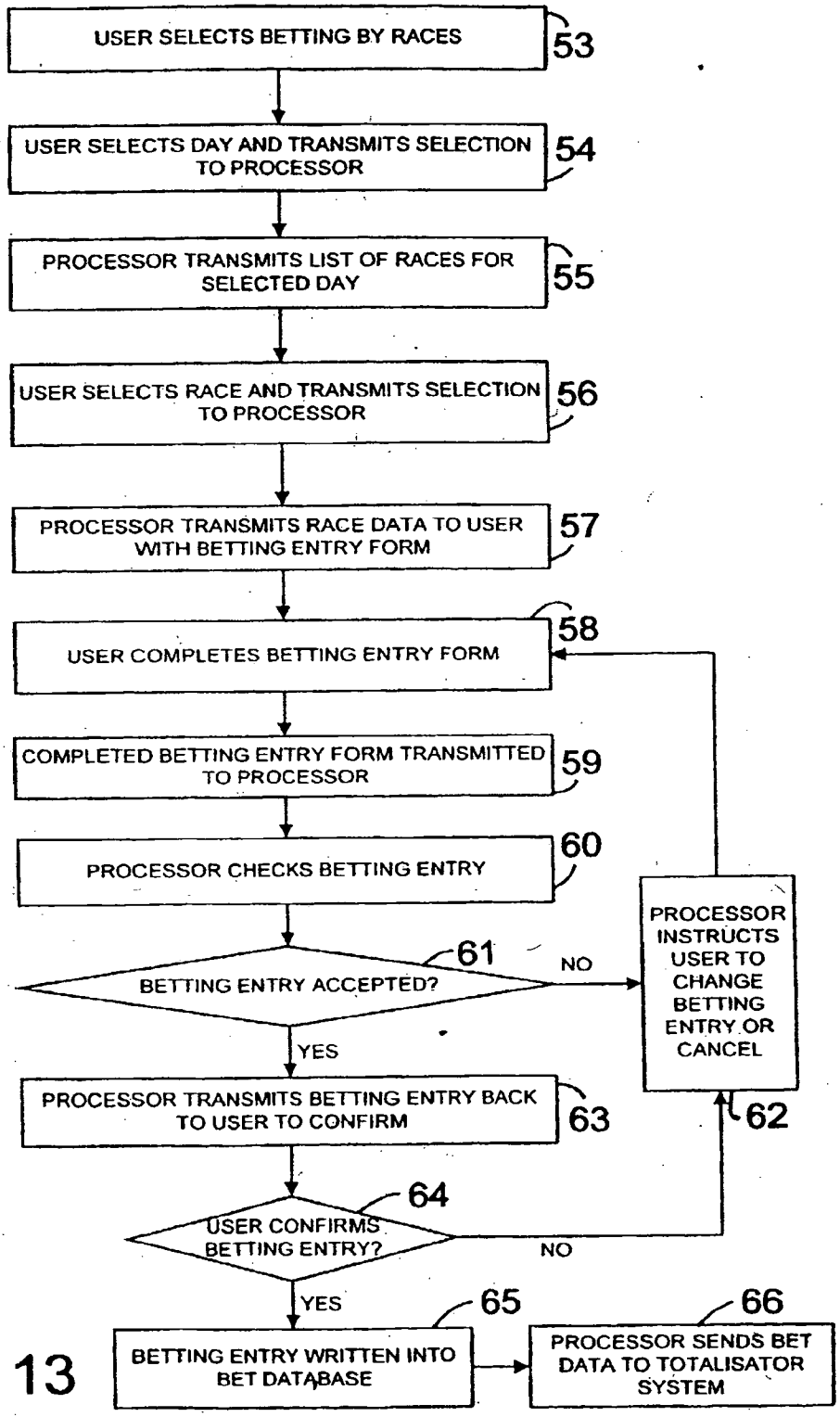
USER SELECTS BETTING BY RACES
53
USER SELECTS DAY AND TRANSMITS SELECTION TO PROCESSOR
54
PROCESSOR TRANSMITS LIST OF RACES FOR SELECTED DAY
55
USER SELECTS RACE AND TRANSMITS SELECTION TO PROCESSOR
56
PROCESSOR TRANSMITS RACE DATA TO USER WITH BETTING ENTRY FORM
57
USER COMPLETES BETTING ENTRY FORM
58
COMPLETED BETTING ENTRY FORM TRANSMITTED TO PROCESSOR
59
PROCESSOR CHECKS BETTING ENTRY
60
BETTING ENTRY ACCEPTED?
61
NO
PROCESSOR INSTRUCTS USER TO CHANGE BETTING ENTRY OR CANCEL
62
YES
PROCESSOR TRANSMITS BETTING ENTRY BACK TO USER TO CONFIRM
63
USER CONFIRMS BETTING ENTRY?
64
NO
YES
BETTING ENTRY WRITTEN INTO BET DATABASE
65
PROCESSOR SENDS BET DATA TO TOTALISATOR SYSTEM
66

Fig. 13

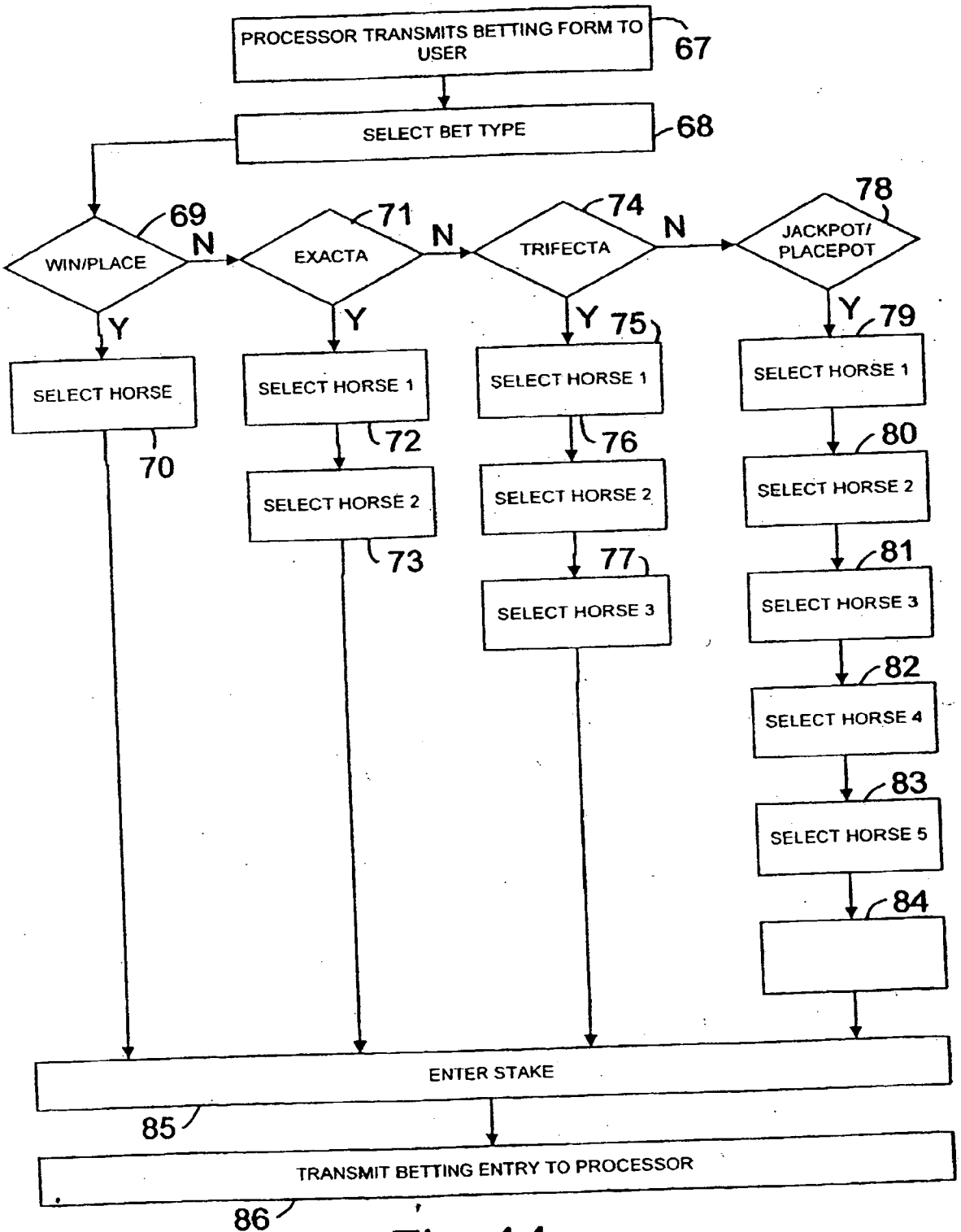
PROCESSOR TRANSMITS BETTING FORM TO USER
67
SELECT BET TYPE
68
WIN/PLACE
69
N
EXACTA
71
N
TRIFECTA
74
N
JACKPOT/ PLACEPOT
78
Y
Y
Y
Y
SELECT HORSE
70
SELECT HORSE 1
72
SELECT HORSE 2
73
SELECT HORSE 1
75
76
SELECT HORSE 2
77
SELECT HORSE 3
SELECT HORSE 1
79
80
SELECT HORSE 2
81
SELECT HORSE 3
82
SELECT HORSE 4
83
SELECT HORSE 5
84
ENTER STAKE
85
TRANSMIT BETTING ENTRY TO PROCESSOR
86

Fig. 14

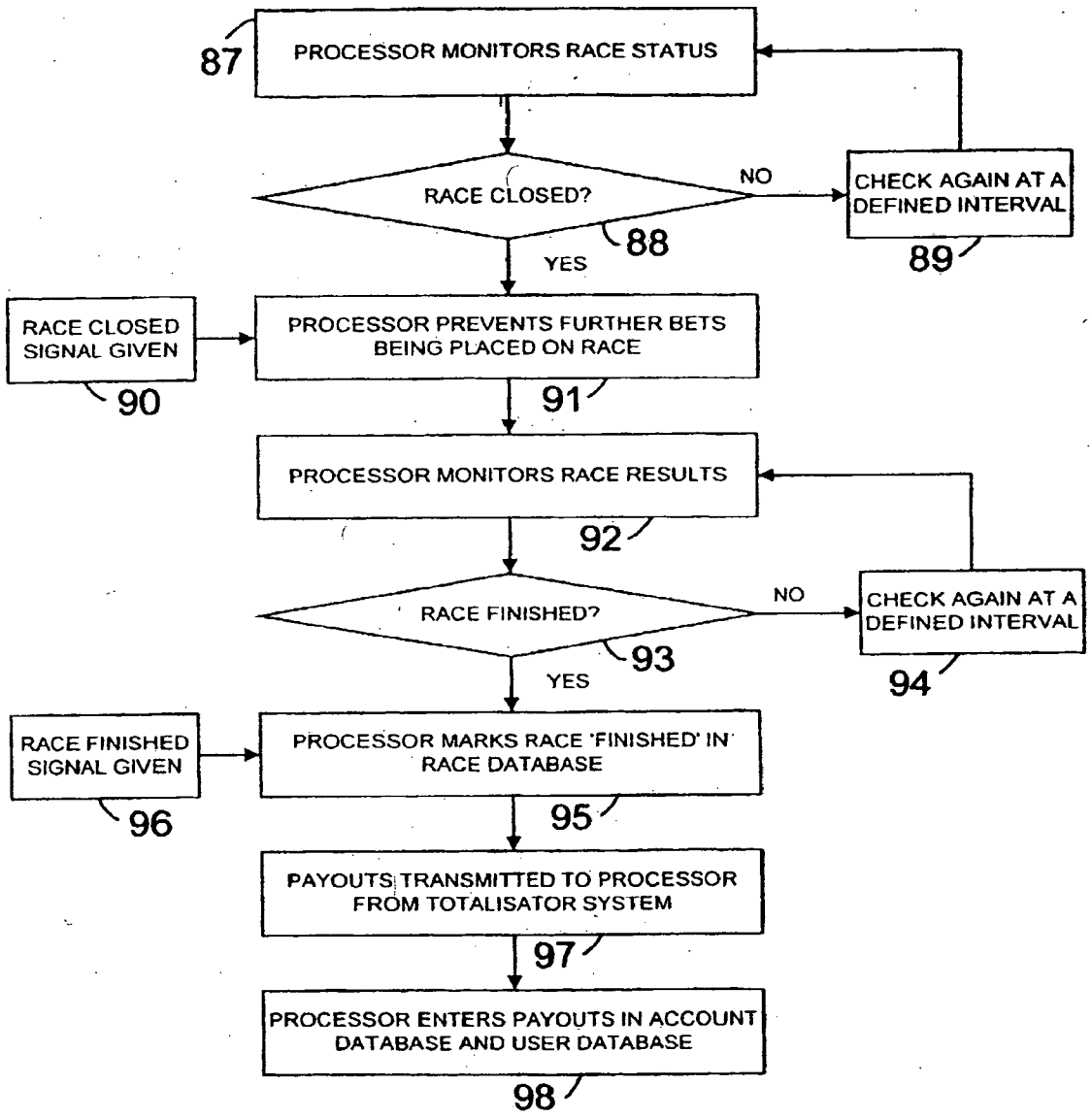
87
PROCESSOR MONITORS RACE STATUS
RACE CLOSED?
NO
88
CHECK AGAIN AT A DEFINED INTERVAL
89
YES
RACE CLOSED SIGNAL GIVEN
90
PROCESSOR PREVENTS FURTHER BETS BEING PLACED ON RACE
91
PROCESSOR MONITORS RACE RESULTS
92
RACE FINISHED?
NO
93
CHECK AGAIN AT A DEFINED INTERVAL
94
YES
RACE FINISHED SIGNAL GIVEN
96
PROCESSOR MARKS RACE 'FINISHED' IN RACE DATABASE
95
PAYOUTS TRANSMITTED TO PROCESSOR FROM TOTALISATOR SYSTEM
97
PROCESSOR ENTERS PAYOUTS IN ACCOUNT DATABASE AND USER DATABASE
98

Fig. 15

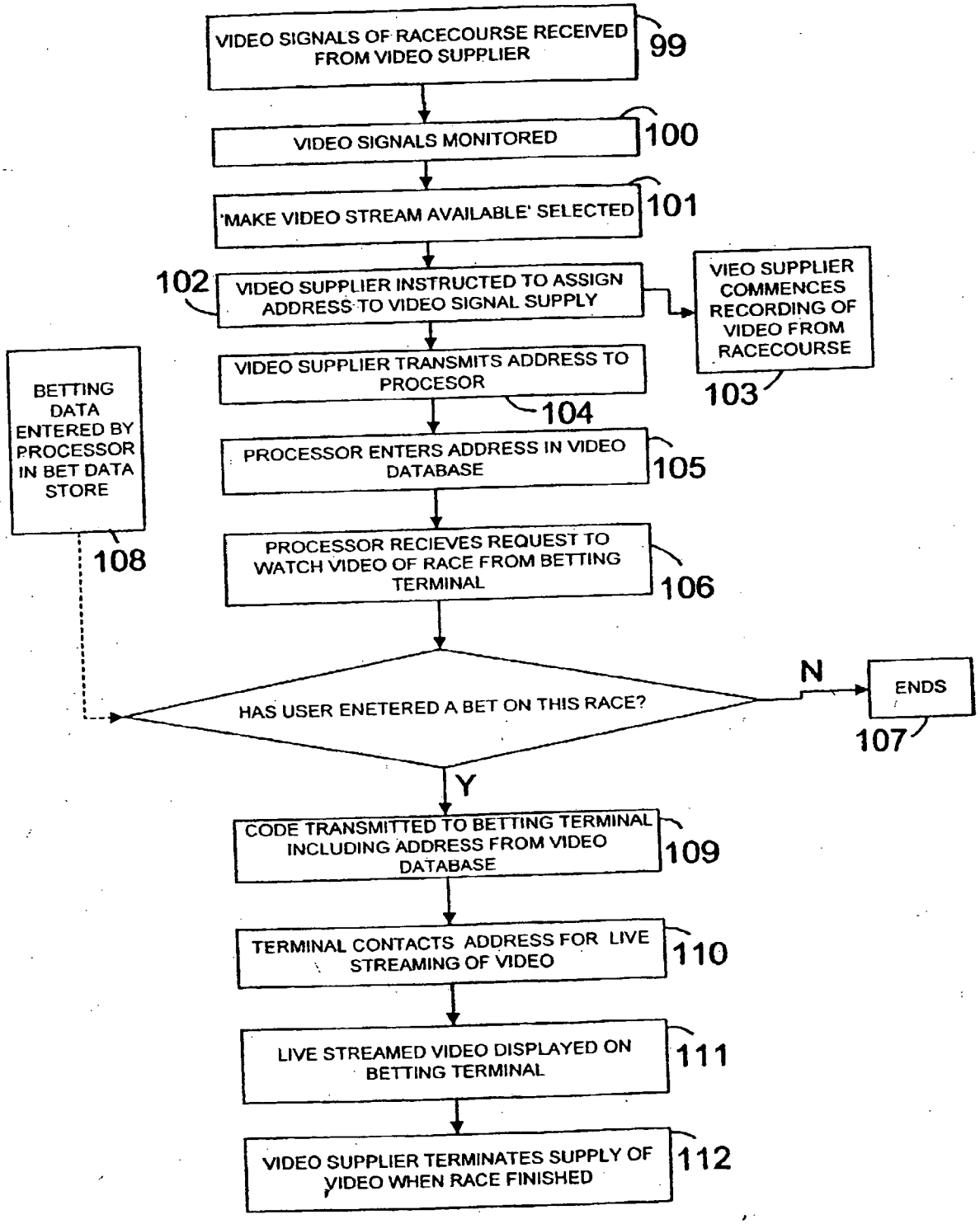
VIDEO SIGNALS OF RACECOURSE RECEIVED FROM VIDEO SUPPLIER
99
VIDEO SIGNALS MONITORED
100
'MAKE VIDEO STREAM AVAILABLE' SELECTED
101
102
VIDEO SUPPLIER INSTRUCTED TO ASSIGN ADDRESS TO VIDEO SIGNAL SUPPLY
VIEO SUPPLIER COMMENCES RECORDING OF VIDEO FROM RACECOURSE
103
VIDEO SUPPLIER TRANSMITS ADDRESS TO PROCESOR
104
BETTING DATA ENTERED BY PROCESSOR IN BET DATA STORE
108
PROCESSOR ENTERS ADDRESS IN VIDEO DATABASE
105
PROCESSOR RECIEVES REQUEST TO WATCH VIDEO OF RACE FROM BETTING TERMINAL
106
HAS USER ENETERED A BET ON THIS RACE?
N
ENDS
107
Y
CODE TRANSMITTED TO BETTING TERMINAL INCLUDING ADDRESS FROM VIDEO DATABASE
109
TERMINAL CONTACTS ADDRESS FOR LIVE STREAMING OF VIDEO
110
LIVE STREAMED VIDEO DISPLAYED ON BETTING TERMINAL
111
VIDEO SUPPLIER TERMINATES SUPPLY OF VIDEO WHEN RACE FINISHED
112

Fig. 16

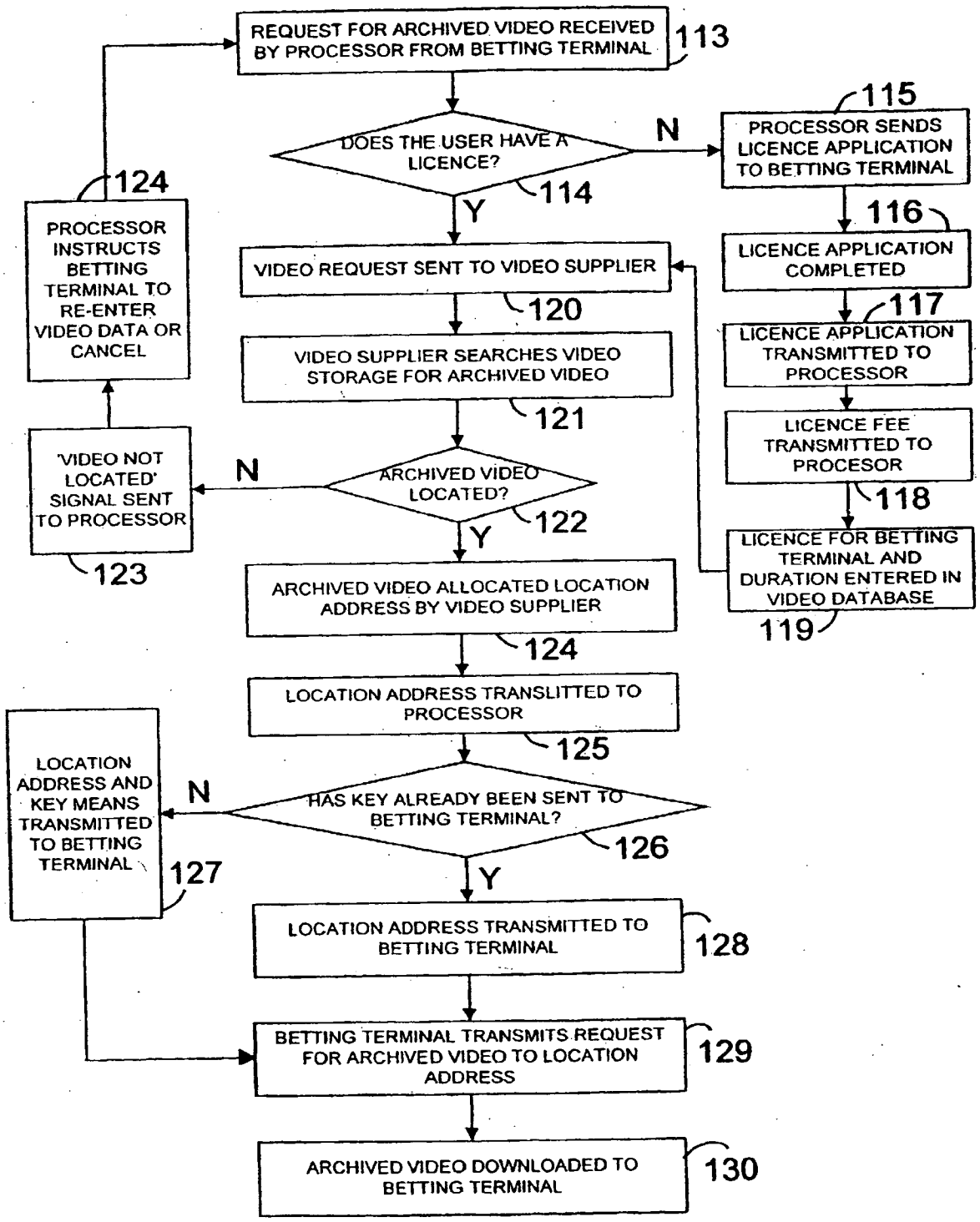
REQUEST FOR ARCHIVED VIDEO RECEIVED BY PROCESSOR FROM BETTING TERMINAL
113
DOES THE USER HAVE A LICENCE?
114
N
Y
PROCESSOR SENDS LICENCE APPLICATION TO BETTING TERMINAL
115
LICENCE APPLICATION COMPLETED
116
LICENCE APPLICATION TRANSMITTED TO PROCESSOR
117
LICENCE FEE TRANSMITTED TO PROCESOR
118
LICENCE FOR BETTING TERMINAL AND DURATION ENTERED IN VIDEO DATABASE
119
VIDEO REQUEST SENT TO VIDEO SUPPLIER
120
VIDEO SUPPLIER SEARCHES VIDEO STORAGE FOR ARCHIVED VIDEO
121
ARCHIVED VIDEO LOCATED?
122
N
Y
'VIDEO NOT LOCATED' SIGNAL SENT TO PROCESSOR
123
PROCESSOR INSTRUCTS BETTING TERMINAL TO RE-ENTER VIDEO DATA OR CANCEL
124
ARCHIVED VIDEO ALLOCATED LOCATION ADDRESS BY VIDEO SUPPLIER
124
LOCATION ADDRESS TRANSLITTED TO PROCESSOR
125
HAS KEY ALREADY BEEN SENT TO BETTING TERMINAL?
126
N
Y
LOCATION ADDRESS AND KEY MEANS TRANSMITTED TO BETTING TERMINAL
127
LOCATION ADDRESS TRANSMITTED TO BETTING TERMINAL
128
BETTING TERMINAL TRANSMITS REQUEST FOR ARCHIVED VIDEO TO LOCATION ADDRESS
129
ARCHIVED VIDEO DOWNLOADED TO BETTING TERMINAL
130

Fig. 17

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RACE BETTNG SYSTEM AND PROCESS

The present invention relates to a race betting system and a race betting process. Betting on races. for example horse races. bicycle races. greyhound races and other types of race. has long been extremely popular. However. it has only been possible in the past to bet on such races by attending a racetrack in person. Off-track betting establishments have been established for a long time allowing users to place bets on races whilst not attending the racetrack. but it is still necessary to travel to the off-track betting establishment. Great interest has been shown in interactive wagering systems and processes which can be carried out anywhere by placing a user in communication with an interactive wagering system via communication systems.

For example. WO97/09699 discloses an interactive wagering system and process in which a data facility is provided which receives wager data and provides racing data combined with video signals. The user is provided with a user terminal for receiving video signals and racing data and for displaying the video signals and racing data on a monitor. The user is provided with input means for inputting wager data which is relayed to the data facility via transaction data communication circuitry. In this way, a user is enabled to place wagers interactively on forth coming races and view the races via the monitor. The data facility further comprises wagering accounts and means for crediting or debiting the wagering account of a user to reflect the wagering activity of the user.

This system is particularly suitable for use with a totalisator. A totalisator is a piece of equipment which allows a large number of individual users to engage in what is known as Pari Mutuel betting. In this system. users place bets upon a number of possible outcomes. For example. in a horse race, a user may place a bet on a particular horse winning a particular race. The total stakes placed by all users are collected and a certain fee is deducted for administration. The remaining sum is divided among users who selected the correct winning horse. A winning user's proportion of the total money

is equal to the proportion represented by that user's stake of all the stakes placed upon the winning horse.

Similar systems are disclosed in WO01/03088 and WO01/03089. In WO01/03088, users are enabled to record races for subsequent viewing. A general archive is provided which may be searched by users to view previous races.

In WO01/03089, a television channel may be provided which is dedicated to racing activities. Notices may be displayed on the screen whilst programmes about racing are playing notifying a viewer of an opportunity to commence interactive wagering on races or runners which are being featured in television programmes.

There is great demand on the part of users to view races either as they occur or afterwards. Typically, however, video data which has to be sent to a user to allow the user to view the video can only be transmitted via a carrier with a high data capacity, in view of the large amount of data required to display the images.

A method disclosed in for example WO97/09699 is to provide video data on a television channel such as cable, satellite or terrestrial television. Such channels are well designed to handle video data which can consequently be streamed continuously.

However, such a system requires a specialised receiving apparatus for receiving television programmes. Where a user is receiving and video data via a communication link such as a modem or telephone line, it is impractical to continuously stream the race data and video data to the user, because the user may wish to use their communication link for other purposes.

In WO01/03088, races can be recorded either centrally at the race data management facility or on the user's video cassette recorder. However, the races can only then be viewed by replaying the recording after the race is finished.

In order to record the race on the user's video cassette recorder, the system automatically tunes the recorder to receive the video signals when the video signals are

sent. However, this is not practical when another application is used, such as a personal computer, as the user may wish to use it for another purpose.

In WO01/03088, video signals are transmitted on the basis of a pre-arranged race schedule. However, there can be problems if the races do not occur according to the time schedule.

It is an object of the present invention to allow users to view races on which they have bet at substantially the same time as the race is occurring. It is an object of the invention to allow the user to only receive such video signals if they want and when they want without being obliged to dedicate their communication apparatus to the source of video signals except for the brief period of time during which the video signals are being transmitted. The present inventors have realised that a race betting system can be configured to monitor the status of a race on which users have bet and to give users notice of when the race is about to begin, so that users can select whether to view video of the race or not.

By monitoring the race condition rather than referring to a race schedule, problems of late race starts can be avoided.

By providing the users with an opportunity to select whether to view the race or not, there is no need for the user's communication facility to be permanently tuned to the source of video signals for longer than the duration of the transmission.

Accordingly, the present invention provides an interactive race betting system comprising means for transmitting race data to a remote betting terminal, bet input means for receiving bet data from a betting terminal, the bet data including a selection of at least one race and at least one runner in the race and an identification of the betting terminal, bet data storage means for storing the input bet data as a data entry, race data input means for receiving race data, the race data including an identification of at least one race and data relating to runners in the race,

means for receiving from a requesting betting terminal a request for video of at least one race.

a processor configured to inspect the bet data in the respective storage means when a request for video is received, and to give a signal if the at least one race is identified by at least one data entry in the bet data storage means which also identifies the requesting betting terminal and

means for allowing in response to the signal the requesting betting terminal to display video of the at least one race.

The present invention further provides a method of interactive race betting, comprising receiving race data, the race data including an identification of at least one race, the status of the race and data relating to runners in the race,

transmitting race data to a remote betting terminal, receiving betting data from a betting terminal, the bet data including a selection of at least one race and at least one runner in the race and an identification of the betting terminal, storing the bet data in a bet data store as a data entry, receiving a request for video from a requesting betting terminal, inspecting the bet data store when a request is received, giving a signal if the at least one race is identified by at least one data entry in the bet data store means, which also identifies the requesting betting terminal and allowing in response to the signal the requesting betting terminal to display a video of the at least one race.

The present invention also provides programme code for controlling one or more processors to implement the method. The betting method of the present invention is carried out electronically. The betting system suitably comprises electronic data handling means, for example at least one computer, for example a personal computer. The data handling means is preferably connected by transmitting means such as a modem to a communication network, for example the Internet, an Intranet or a dedicated communications system.

In a further aspect, the present inventions provide a carrier medium carrying the computer programme code according to the invention.

The computer may communicate with the user by any convenient communication means, but the system is particularly suited to implementation over an electronic communications network employing an Internet protocol, such as an Intranet or extranet

communication network or the Internet or World Wide Web. In this case, the software applications may comprise or consist of instruction codes, for example for web data pages, such as HTML (Hypertext Markup Language) code, XML (Extensible Mark-up Language) code, and/or Java, ActiveX trade mark) or Perl code or scripts in other programming languages.

The means referred to may all be software such as program code and / or instruction code for internet/web data pages in HTML, XML, Java or similar. Generally speaking they will each comprise coded instructions for a computer and may be separate applications or parts of a single program.

The present invention can be embodied in computer program code, and as is well known to those skilled in the art, the program may be implemented at a client computer or a server computer as desired. Computer programmes may be provided to the computers by any conventional carrier medium such as tape, disc, program memory or other storage media or, alternatively, a program may be provided via a communication network such as an electrical signal.

The processor for implementable instructions of one or both of the systems may be provided on a data carrier or storage medium such as a hard or floppy disc, ROM or CD-ROM or an optical or electrical signal carrier. The processor implementable instructions of the betting terminal may be stored in the data store of network server such as a web server for example as part of a page of Internet data such as a web page. In another aspect, the invention provides a data carrier carrying a processsor implementable instructions for the betting system.

The present invention will be hereinafter described with reference to horse racing, but it will be understood that this is an embodiment only and the system may be equally applied to any other form of racing.

The race data may be input to the system by any suitable means. For example, race data may be typed in using a keyboard. Alternatively, the race data may be received in the form of a signal from a race data supply terminal. For example, such a signal may be

received via a communications network or via dedicated communication lines such as telephone lines. Race data may be input also by other means, such as scanners, or by the use of data carriers such as discs, programmed with race data. The race data will include at least an identification of at least one race and data relating to runners in the race.

The race may be identified by specifying at least one racecourse, being a geographical location of the race and an identification of the race, for example by race time or name. Suitably, all of this information is provided.

The race data may further include information such as the type of class or race (for example, in horseracing, whether it is a flat race or steeplechase), the distance over which the race is run, and prizes awarded to winners in the race.

The race data relating to horses running in the race suitably includes an identification of each horse, for example the name of the horse and the means of identifying the horse, for example the saddle cloth number and/or racing colours.

Suitably, further horse data is selected from any or all of:

- the name of the jockey
- the name of the trainer
- the rating of the horse
- previous form for the horse
- comments on the horse from experts
- status of the horse (whether still running or scratched from the race, i.e. removed and not running for various reasons)
- the age of the horse
- the weight carried

These data may be provided by race courses or by established race data agencies, such as Tattershall's or Weatherby's.

Further race information may be selected from:

- weather at the race course
- condition of the course at the race course
- pictures of the race course
- pictures of the horses and/or jockeys
- diary information, setting out the date and location of forth coming races
- whether or not bets may be made on forth coming races.

Different items of racing data may be input by different sources. For example, data relating to horses running may be obtained from the racecourse itself. However, comments on the horses running may be obtained from independent experts using different input means.

The race data will further include the status of the race. The status data may be selected from:

Jockey close – indicating that betting is not yet open

Going down – horses proceeding from the parade enclosure to the starting gates, betting permitted.

At the post. Horses have reached the starting point for the race, betting is still permitted.

Going behind. Horses entered into the starting gates; betting still permitted.

Betting no longer permitted.

Specification of expected time before the race commences.

Race status data may be input by any suitable means. Preferably, the system is configured to receive race status data from a racecourse itself. This data may be received directly from the racecourse or indirectly. For example, this data may be received from a totalisator, as explained further below. It is preferred that the race status data is received substantially in real time. That is, it is preferred that it is not deduced from a pre-determined schedule. In this way, alterations due to delay in the racing schedule can be allowed for.

Race data may be sent to a betting terminal by any suitable means. The race data sent to the betting terminal may be selected from the race data received by the system. The

race data may be sent at regular intervals to the betting terminals. However, it is preferred that race data be sent to the betting terminal upon request from the betting terminal. For example, it is preferred that the betting terminal and system be in a client-server relationship.

It is particularly referred that the race data is held at an information site on the system, the information site being accessible by accessing means of the betting terminal whereby the betting terminal may act as a user interface means. It is particularly preferred that the information site comprises a web page. Suitably, the access means comprises processing apparatus operating a web browser application.

Suitably, the race data is provided to the betting terminal in a plurality of steps responsive to requests from the betting terminal.

For example, in a first step, a request may be received from the betting terminal for data relating to races occurring on a selected day. In response, data relating to races for the selected day may be sent to the betting terminal so that the user may use the betting terminal to select a particular race. In response to this selection, the system may send to the betting terminal a list of allowable bet types. These may include any bet types which are known in the art, being suitably selected from:

Win – the selection of a horse to finish to first place in a selected race

Place – the selection of a horse finished first or second in a selected race

Exacta – the selection of the first two horses finishing, in the exact order, for a selected race.

Trifecta – the selection of a horse to finish first, second or third in a selected race.

Jackpot – the selection of a single horse to finish first place in a single race.

Placepot – the selection of a horse to finish first or second in a selected race.

The system may be configured to send, in response to the selection, data relating to the horses running in the selected race.

The data may be sent to the betting terminal to configure the betting terminal in the form of a user interface. The configuration data sent to the betting terminal suitably depends upon the type of bets selected. For example, where a win bet is selected, the user interest will comprise a single field for completion by the user with the name of a single horse.

Finally, the system may be configured to receive from the betting terminal an indication of the stake to be placed by the letter for the bet.

This series of steps may be operated in a different order. For example, the system may receive from a betting terminal a request for a list of races in which a given horse is running. The system may be configured to respond to such a request by sending a list of races in which the horse is running to allow the user to select a given race, followed by a particular type of bet.

In a preferred embodiment, the bet data is sent to the betting terminal in the form of a web page. The web page may be configured to resemble a conventional race card of the type typically issued to betters attending a racetrack.

Other data may be sent by the system to a betting terminal. For example, data may be sent to configure the betting terminal to provide the user with the option of withdrawing from a bet or correcting a bet.

The system may be configured to transmit the submitted bet data to the betting terminal for confirmation. The system may be configured to receive a confirmation signal from the betting terminal whereupon the bet is recorded in the bet data store and is deemed to be placed.

The bet data included in the bet data store must include an identification of the betting terminal. This identification may comprise a name, code number, code word, password or the like. It may suitably include an e-mail address whereby an e-mail message may be sent to the betting terminal.

The bet data included in the bet data store may include an identification of the user. Normally, users will access the system of the present invention from the same betting terminal each time so that in many cases a request from a given betting terminal will imply request from a given user. However, this is not necessarily the case, and the system may be configured to send a request for an identification of the user to the betting terminal. This user identification may include the name and a password of the user.

In a preferred embodiment, the system will, in response to a request from a betting terminal, sent to that betting terminal a copy of all data in the bet data storage which includes the identification of the respective betting terminal.

The system is suitably configured to process bet data input to allow potential winnings to be calculated in a conventional manner. The system may be used for fixed odds betting but it is preferred to configure the system for totalisator betting.

Accordingly, the system is suitably configured to transmit the bet data to a totalisator. Such bet data should include a reference identification. For reasons of confidentiality, the name, e-mail address or other recognisable identification of the betting terminal is suitably not used. Suitably, the system is configured to attach to each betting data entry a unique reference identification.

Suitably, the betting system comprises an account management means, comprising account data store means storing account data comprising, for each betting terminal, at least an account balance. The account management means may be configured to set a limit on the amount of credit which may be entered against a given betting terminal. In this way, when betting data is received from a betting terminal, the account management means may be configured to inspect the account data store and the amount of the stake in the betting data and the credit limit of the user to see if the credit limit will be exceeded. If the credit limit will be exceeded, the processor may be configured to send a message to the betting terminal refusing to accept the bet.

Suitably, the system is configured to receive from race result data, preferably from a totalisator. Such result data suitably includes an identification of a particular race, an identification of the order in which horses crossed the finishing line, an identification of sums won, accompanied by reference identifications to identify which betting entries won which sum. The system is preferably configured to search the bet data store to locate the bet data entry to which the reference identification corresponds and to credit the account of the betting terminal by the user identified by the bet data entry with a sum corresponding to the sum won.

Win data may be transmitted to the betting terminal to notify the user that they have won a given sum of money.

The system may be configured not to make race data available to a betting terminal unless the user of the betting terminal is a subscriber to the system

The betting system may be configured to receive a request from a betting terminal to subscribe to the betting system. In response to such a request, a request for information may be sent to the betting terminal. The information requested may be selected from:

- betting terminal data, selected from: specification of the betting terminal, type of betting terminal (PC or MAC), available memory space, available software. If suitable software is not available, the betting system may be configured to identify to the betting terminal a site from which software can be downloaded.
- name
- selected password (this may be selected by the user of the betting terminal or allocated automatically by the betting system)
- other identification data (for example, date of birth, address etc)
- contact details (e-mail address, telephone number, fax number etc –
- financial data, including name of user's financial institution, account number, type of account, sorting code etc.

Suitably, the system is configured to request the user to insert a password. The system may then be configured to transmit a request to the betting terminal for the user to confirm their password.

It may also be necessary to check the age of the user and the user's location. In some parts of the world betting is only permitted in certain states.

As part of the subscription procedure described above. the system may be configured to transmit a payment request to the betting terminal, to request the user to put the account of the respective user in credit or so that a part or all of outstanding debits may be paid off. The payment may be made by any suitable means. for example manually by despatch of a cheque or payment order. Alternatively, it may be made electronically by bank transfer or it may be paid from the user's debit card or credit card.

The system may be configured so that, when it receives a request from a user to commence betting, the system transmits to the betting terminal a request for log-on information. The log-on information may include the name of the user of the betting terminal and their password. Other information may be requested. The system may then be configured to receive the completed log on information from the betting terminal and to compare the completed log in information with records of user names and password. If the entered user name and password matches data in the user name record, the system is configured to accept further requests from the betting terminal.

In the normal way, the user may be allowed a specific number of attempts to enter the correct password. If the password is not entered correctly in the specified number of attempts, logon may be denied or, alternatively, the processor may be configured to transmit to the betting terminal a second request in which other data specific to the user is requested, for example date of birth, key facts or bank account details.

The system may be configured to provide to a betting terminal racing related information upon request. For example the racing related information may be selected from the following:

Weather forecast for general area or for a specific racecourse

General news related to racing or racecourses

Features and articles

Expert assessment of horses (including tips, speed ratings, etc.)

In order to provide such details, the system is suitably configured to receive general data. General data may be input by any suitable means for example by keyboard, by a communication network such as the Internet, and Intranet or other network, by dedicated telephone lines from suitable sources or in the form of pre-recorded material on data carriers.

The system may be also configured to provide estimates of the winning payout if a bet is placed upon a given horse. This data may be obtained from general sources in manner described above. However, this information is generally provided by totalisator systems and the processor may be configured to receive the information directly from the totalisator system.

The system is configured to inspect the bet data store when at least one race reaches a defined status. This define status may be "betting closed" or "going down" or "n minutes to start" wherein n is a defined amount. However, in a preferred embodiment, the defined status is that the video signals are available of the race or preparations for the race The monitoring means may be configured to monitor incoming race data. The monitoring means may comprise means for receiving a signal that video signals are available. The process or may be provided with signal input means for receiving the signal. The signal may be input by a suitable means, for example via communications network, via dedicated telephone lines or by a manual input from an operator at the race track or by an operator of the system. For example, the operator of the system may monitor general incoming video signals and, at a point to be determined by the operator, decide that commencement of the video supply may begin.

The processor is suitably configured to receive a signal which indicates that video is now available, the signal also identifying the race for which video is available. The processor is preferably configured to search the bet data store or race data store for a race corresponding to the race identified by the signal, and to enter in the bet data store or race data store on a note that the video is available for the race.

The processor may be configured to give a signal if the at least one race for which video is available is identified by at least one data entry in the bet data storage means. Where the at least one race is identified in a plurality of data entries, a signal is preferably given for each data entry.

In order to allow a terminal to receive video, code may be transmitted to the betting terminal,

The code transmitted to the betting terminal may be any suitable code. It may be configured to allow the betting terminal to access video data. The system may be provided with means for transmitting video signals of the at least one race, the code transmitted to the betting terminal being configured to allow the betting terminal to access the means for transmitting video signals. For example it may include a password,or other enabling software. In the alternative, the source of video data may be located separately from the betting system. In this case, the code transmitted to the betting terminal may be sufficient to identify to the betting terminal the source of video data. For example, the code may comprise a communication system address, such as an e-mail address, telephone number, channel number or the like.

The system may be configured to receive communication system addresses for each video of each race. The system may be configured to store each address of each video. Preferably, the communication system address changes from race to race, so that the user can only view the race which is being transmitted from the given communication system address and no subsequent or simultaneous video.

This system is considered to be inventive in its own right. Accordingly, in a further aspect, the present invention provides an interactive race betting system comprising:

race data input means for receiving race data, the race data including an identification of at least one race and data relating to runners in the at least one race,

race data storage means,

means for transmitting race data to a betting terminal,

bet input means for receiving bet data from a betting terminal, the bet data including a selection of at least one race and a selection of at least one runner

bet data store means for storing the input bet data as a data entry,

means for transmitting a request for race video location data to a video data source, means for receiving from the video data source the race video location data and a video location data store for storing the race video location data

means for receiving a request for video of at least one race from a requesting betting terminal,

a processor configured to search in the race video location data store for video location data relating to the selected race and, in order to allow the betting terminal to display video of the selected race, to transmit to the betting terminal the video location data.

Preferred features of this aspect of the invention are as for the other aspects of the invention.

The code permits the betting terminal to receive substantially live and real-time video of the race. In this context, "substantially real-time" means that a time period of no more than a few minutes, preferably no more than ten minutes and more preferably no more than two minutes elapses between the generation of video signals at the race and the receipt of the video signals by the betting terminal.

In a totalisator system, betting terminates before the beginning of the race, so slight delays in transmission of video signals are acceptable because they will not compromise the security of the betting.

Preferably, the code transmitted allows the betting terminal to receive streamed video signals. In this way, the user does not have to wait for the entire transmission to be downloaded before it can be viewed.

A suitable system for viewing video on the betting terminal comprises Realplayer software (trade mark) or Mediaplayer (trade mark).

The code transmitted to the betting terminal may be configured to allow the betting terminal to receive audio signals relating to the race in an addition to the video signals. For example, audio signals may be transmitted on a side band of the video signals.

Because the video is typically copyright material, it is preferred that steps are taken to prevent unauthorised copying of the material.

A user may be permitted to download a video of a race which has finished. The system may be configured to send a request to the betting terminal for payment of a licence fee to download the video.

A licence fee may be requested per video downloaded. In the alternative, the licence fee may be a blanket licence fee of a defined term, for example of the term of a month, two months or a year, as appropriate. The blanket licence fee may permit the user to download any videos within the term of the licence.

The processor may be configured to receive from the betting terminal a request for an archived video to be downloaded. The processor may be configured to inspect the betting terminal licence storage means to see if the betting terminal is associated with a suitable licence. The systems may be configured to send a signal indicating that the request is refused, if the user has no licence.

In the alternative, the system may be configured to transmit to the betting terminal data representing the archived video accompanied by key means, the key means comprising code which will allow the video to be viewed only within a specific time period representing the licence term of the licence purchased by the user.

Preferably, the processor is configured to record in a data store whether or not a key means has been transmitted to a given a betting terminal or user and to identify the term associated with the key means. If a request is subsequently received from a betting terminal to view archive video, the processor is suitably configured to inspect the data store to see if the user has paid a licence fee and to see if the user has already received key means. If the user has already received a key means and the term of key means has

not yet expired, the processor is suitably configured to send archive video to the user without attaching a key means. This is particularly appropriate where the key means represent a blanket licence which allows the user to watch any number of videos within a specified time period. Each time period is represented by single key means.

Suitable software for transmitting key means is available under the name BRM (trade mark)

The betting system may be configured to receive race results. The race results may be input by any suitable means. They may be input by keyboard. Alternatively, they may be received via a communication network or via dedicated communication links. They may be obtained from a totalisator, from a source of information, such as Tattershalls or Weatherby's or from a racecourse.

The race results may be "unofficial" results obtained by a viewer of the race assessing the order in which the horses completed the race. However, it is not uncommon for the results of races to be unclear, if at least two horses pass the finishing line very close together. In such cases, the race track normally commissions an enquiry to determine which horse finished first. This may take some time so that official results may only be available after a period of may be one day.

The processor may be further configured to send to the betting terminal odds information, allowing the user to see what odds are being laid against a particular horse winning a race.

The system may further include a research database. The research database may be configured for storing information relating to any of the following:

Horses
Trainers
Jockeys
Racecourses
Races
Results

The processor may be configured to receive a request for a search from a betting terminal. The search may comprise a name, or a string of letters which form a part of a name or other information which the user operating the betting terminal wishes to search. For example, if the user wishes to look for information about a horse called lucky lad, the user may enter the letters LUC at a betting terminal and transmit a request for a search on horses with this name.

The processor is then configured to search for all entries relating to horses which match the search parameters. The processor is also configured to send a list of data entries which match the search parameters. The user may then send request for further information via the betting terminal, for example seeking the horse's history, parentage, results in previous races, weight, age etc. In this way, a user can very rapidly obtain information which will allow the user to make suitable betting decisions.

The search may be launched from an information site being contacted by user interface means. For example, the information site may comprise a web page and the user interface means comprises a web browser on the betting terminal.

Many users are interested in following the fortunes of a particular horse, which they believe has potential to win many races. Accordingly, the present invention preferably provides user preference store. The system is suitably configured to receive from a betting terminal an identification of at least one horse which is of general interest to the user. The system is then configured to enter the name of this horse in a user preference store database together with an identification of a betting terminal of the user who has selected the horse.

The system may then be configured to inspect the race database at regular intervals to find if a horse which is entered in the user preference store also appears against any races in the race database. If a match is found, the processor is configured to send a message to the betting terminal identified with the horse in the user preference store offering the user an opportunity to bet on the horse.

This facility is considered to be inventive in its own right.

Accordingly, in a further aspect, the present invention provides an interactive race betting system comprising:

race data input means for receiving race data, the race data including an identification of at least one race and data relating to runners in the at least one race, the racecourse, trainer or rider,

race data storage means,

means for receiving from a betting terminal option data relating to at least one of a runner, race, racecourse, trainer or rider,

an option data store for storing the option data received as a data entry,

a processor configured to inspect the race data store at regular intervals and the option data store and, if data in the race data store matches data in an entry in the option data store, to transmit to the betting terminal identified by the option data entry, the race data of the data entry, and

bet input means for receiving bet data from the betting terminal.

Preferred features of this aspect are as for the other aspects of the invention.

The user database may permit the user to select upto any given number of horses, for example upto ten horses.

It may happen that after a successful season, an account against a given betting terminal is substantially in credit. The user may wish to withdraw funds from the account in order to recoup their winnings. Accordingly, the account management means is suitably configured to receive an instruction from a betting terminal to pay out money from the user account. The account management means is suitably configured to compare the request for withdrawal of funds against the funds listed in the account to confirm that there is sufficient money to meet the request. If sufficient money is present, the account management means may send a request to the user to identify which form of payment is preferred. For example, the payment form be selected from:

Despatch of a cheque to the user

Payment to the user's bank account

Payment to the user's debit card

In order to allow a user to operate the account management means, the account management means may be configured to send to the betting terminal an identification request, requiring at least one form of identification, for example, a password, from the user. The account management means is preferably configured to request at least two forms of identification and may be more. For example, the account management means may request bank account data, bank account sort code, debit card number, debit card sort code and debit card expiry date.

Once the account management means has received this information, it may be configured to send back a checklist of the information to the betting terminal for the user to confirm.

The account management means may be configured, to send account details to a betting terminal upon request by a duly identified user.

The system of the present invention may provide other services to users. These services may be selected from:

To allow the user to play a game, for example a computer generated horse-racing game,

To allow users to enter a quiz

To provide a message transmission means, for example an e-mail facility or bulletin board

To provide help for users

To provide tips on races

To provide an opportunity to make purchases of racing related goods or other promotional material.

These services may be made generally available to users or they may require the user to make payment of a fee. The account management means may be configured suitably to process the payment of a fee for the subsidiary services.

The present invention will further be described by way of example only with reference to the accompanying drawings, in which:

Figure 1 is a schematic illustration of a race betting apparatus according to the present invention.

Figure 2 is a schematic illustration of the totalisator system for use in figure 1.

Figure 3 is a schematic illustration of an arrangement which may be used in figure 1 for providing video of races.

Figure 4 is a schematic illustration of the race database of figure 1.

Figure 5 is a schematic illustration of the user database of figure 1

Figure 6 is a schematic illustration of the account database of figure 1

Figure 7 is a schematic illustration of the archive database of figure 1

Figure 8 is a schematic illustration of the research database of figure 1.

Figure 9 is a schematic illustration of the steps involved in registration a new user.

Figure 10 is a schematic illustration of the steps involved when a user logs onto the system.

Figure 11 is a schematic illustration of the steps involved in entering horses' names in the user database.

Figure 12 is a schematic illustration of the steps involved in placing a bet by selecting a horse

Figure 13 is a schematic illustration of the steps involved in placing a bet by selecting a race.

Figure 14 is a schematic illustration of the steps involved in entering bet data.

Figure 15 is a schematic illustration of the steps involved processing bets placed on the system.

Figure 16 is a schematic illustration of the steps involved in providing video of a race.

DETAILED DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic illustration of an apparatus for interactive betting according to the present invention.

At the heart of the apparatus 1 is the system 102 according to the invention. The system 102 comprises a processor 103. The processor 103 is configured to receive data inputs from a wide range of sources. Suitably, the processor is configured using Broadvision (Trade Mark) software which allows it to manage a plurality of inputs and outputs.

The processor 103 is connected to at least two communications networks. It is connected to the internet 100 and also to the public switch telephone network (PSTN) 118. It may also be connected to other communications networks, for example a television signal distribution network (not shown).

Also connected to the internet 100 and the public switch telephone network 118 is a user's financial institution 115, for example a bank.

Also connected to the internet is a betting terminal 101 in the form of a user's PC. Also connected to the public switching telephone network is a user's telephone 117 which incorporates a video screen 122.

The processor is configured to receive data inputs from a racecourse 109. The racecourse 109 is provided with a racecourse data centre 113 at which various types of data may be input, for example relating to the weather at the racecourse, the going of the ground, the number of runners, the status of the race, late removals from the race ("scratches") or other suitable information. The processor may receive data directly from the racecourse data centre 113 or it may receive it by the intermediary of a general data centre 110.

The general data centre 110 may also provide further data to the processor, for example race listings in advance, race timetables, archive data about runners and riders, etc. An example of a general data centre in the United Kingdom is the Wetherby's race information service or Tattershalls.

The processor 103 is further connected to a totalisator system 112. The totalisator system 112 is further described with reference to Figure 2 below. The totalisator system 112 is configured to receive betting data from the processor 103 and to transmit confirmations of betting data, odds data, running data, race status data and results data to the processor.

Processor 103 is connected to a video supplier 120. The video supplier 120 receives video signals recorded live at the racecourse via camera 111. The video supplier 120 is further connected to the internet 100 as shown. It may also be connected to the PSTN 118 or other communications network in the manner which is not shown in Figure 1. The video supplier 120 further comprises a video storage unit 121 for archived video which will be explained further below.

The processor 103 may also receive manual inputs from a keyboard 123 or a data reading device 124 for reading data entered on a carrier medium. The processor 103 is further connected to an account database 104. The account database is configured to contain information about user accounts. The processor 103 may enter data into the account database 104 or read data from it. The processor 103 is further connected to a bet database 105. The bet database 105 is configured to hold bets. It is also configured to hold information concerning users, including the user's account number, user's list of preferred horses, bets placed by the user and the like. The processor may enter data into the user database or read data from it.

The processor 103 is also connected to a race database 106 in which race data is entered and from which race data may be read. The processor 103 is further connected to an archive database 107 in which information relating to races which have been completed may be entered or read.

The processor 103 is further connected to a research database 108 containing information about matters such as jockeys, trainers, horses, race tracks or results from the past. The processor may enter data into the research database 108 or read from it.

The processeor 103 is further connected to a video database 125 containing information about live and archived videos of races. The processor may enter data into the video database 125 or read data from it.

Figure 2 is a schematic illustration of a totalisator system 112. The processor 201 of a system according to the invention is shown at the top of the diagram. It is connected to a first totalisator, totalisator 1. Totalisator 1 may also be connected to second and third totalisators 204 and 211.

Totalisators are well known in the art and are available for example from Amtote International or Autotote Inc. of the United States. A well known protocol for passing betting information between totalisators is established, referred to as ITSP (Intertote Tracking Service Protocol). It will not be described further here. Totalisators 204 and 211 may be connected together via ITSP as well. Each of totalisators 2 and 3 may be connected to racecourses 207,208,209,210,213,214 or 215. In this way, the processor 201 is enabled to place bets on races occurring at a very large number of racecourses and to receive racing data from totalisators relating to a large number of races. The system of the present invention allows users to bet on an extremely wide range of races, increasing the attractiveness of the system for users.

Figure 3 shows the system for providing live or archive video to users.

Figure 3 is based upon Figure 1 but is simplified, a number of items being omitted for clarity. At the centre is the system 303 according to the invention, 303. The system includes a processor 312 which is connected to a communications network 302, for example the internet. Also connected to the communications network is a betting terminal 301, for example a user's PC. Further, a video supplier 304 is also connected to the communications network. Two lines are shown extending from the video

supplier 304 to the communications network to show that the video supplier 304 may be supplied with a number of different addresses by which it may be accessed from the communications network 302.

The video supplier 304 is further connected to at least two cameras 305.306 located at different racetracks and a video archive 307. The video supplier 304 is configured to receive signals live from the cameras 305 and 306 as races occur live. The video supplier 304 is configured to route video signals from the cameras 305 and 306 to the video archive if required or to the communications network or to the system 303.

The system 303 comprises a pair of monitors 308. Each monitor 308 monitors a stream of video data coming from a single camera 305 or 306. The monitor 308 or 309 is suitably manually supervised, by an operator watching the video signals. Switch means 310 and 311 are provided attached to each monitor 308 and 309 respectively. When it is detected via monitor 308 or 309 respectively that a race has reached a given status, for example 'horses going down', switch means 310 or 311 may be used to send a signal to the processor 312 indicating that race video may now be watched by users. The processor 312 is configured to receive signals from the betting terminal 301 via the communications network 302. Information about bets placed by a user of the betting terminal 301 is stored by the processor 312 in the user database 313.

The processor 312 is further connected to the video supplier 304 to send instructions to and receive data from the video supplier. When the switch 310 on 311 is used to enable users to view race video a signal is sent from the processor to the video supplier 304. The video supplier 304 will then supply data identifying where video of the selected race may be viewed. This data is stored in the video database 314.

Figure 4 shows the structure of the race database 106. Races are first of all classified by the location at which they occur. They are then classified by a specific race identifier, for example the scheduled starting time of the race or a name. For each race, a plurality of runners will be identified. Other data may be identified against each race, for example the length of the race, the type of the race, the going, the prize money etc. Data in the race database may be obtained directly from the racecourse, or more

generally from the general data centre 110. Wetherby's or Tattershalls. Typically, race data in the race database is entered up to date the day before a race occurs.

Figure 5 schematically shows the structure of a bet database 105. It shows bet data for three users, users 1, 2 and 3. For each user, there is a list of bets placed by the user identified by the particular race, the type of bet placed, the stake placed and the horses selected, if necessary with the positions in which the user has bet the horses will finish the race. Further, for each user, there will be additional information, such as the account number and password. It may also be recorded whether the user has purchased a licence to view archive videos (which will be explained further below). Further, as will be further explained below, each user may enter a list of horses which the user wishes to follow. These are entered in the "user's horse list" box.

Figure 6 schematically shows the structure of the account database 104. For each user, for example user 1, a password, account number and balance may be entered. The processor 103 may include an account management means whereby debits and credits may be applied to a user's account.

Suitably, the system operates on an account credit system. The system will not permit any bets to be placed unless the account for the given user is in credit. The account database suitably includes a transaction history showing a list of all transactions made by the user. The database also includes further information about the user. For example, bank account details, including if necessary bank sort code and a bank name may be included. The postal address, e-mail address, fax number and telephone number of the user may be entered. A spend limited to the determined by the operator of the system or by the user themselves may be entered. The spend limit will limit the amount of money which may be spent on any single day by a given user.

Figure 7 schematically shows the content of the archive database 107. The archive database includes three fields. One includes archived user account data. Data from the transaction history of a user account which is older than a certain age (for example one month) may be removed from the transaction history and entered into the user account archive.

Data relating to races which have been finished may be entered into the archive database. For example, all data relating to a race in the race database which finished more than one day ago or was cancelled more than one day ago may be written into the finished races database, along with the results of the race.

A general archive is also provided for archiving other data, for example a record of other information provided by the system.

Figure 8 schematically shows the content of the research database 108.

The research database is broadly divided into five fields:

data relating to horses
data relating to trainers.
data relating to jockeys
data relating to racecourses
data relating to race results from the past.

Each of these fields may be extensively linked to other fields. For example, information about a given horse in the horse data field may be connected to information about its trainer in the trainer data field, and information about jockeys who have ridden the horse in the past in the jockey data field, information about races in which the horse has raced in the results data field. In this way, a user of the research database may be able to collect a very large amount of information about a subject of interest to the user very quickly.

Figure 9 shows the steps involved in registering a new user of the system.

The system 102 is configured to operate as a server for example a web server. To commence use of the system 102, a new user using, for example PC 101, must first of all request an electronic application form from the processor (step 1).

Before the application form is sent, the processor is configured to send a signal which checks the configuration of the new user terminal 101 in step 2. This is to confirm that the new user has the required software, processing speed, memory capacity and display required to use the system 102. In step 3, if the user terminal cannot be made suitable for using the system, the process will end in step 4.

If the user terminal does not have the required software, the system may be configured to direct the user to a source of suitable software, for example a website from which the software may be downloaded.

When the user terminal is configured so that it can operate the system of the invention, an application form is transmitted to the user in step 4. In step 5, the new user completes the application form and transmits the application form to the processor via the internet 100. In step 6, the processor will check the form.

In a first step 7, the processor checks to ensure that all the information is present. If information is found to be missing, the processor sends, in step 8, a request for missing information. In step 9, the user will resubmit the electronic application form including the missing information. In step 10, the processor assesses whether the application can be accepted. The processor will run a number of checks.

The user must be above a certain age, specified by the law, below which betting is not permitted.

In some parts of the world, betting is not permitted at all. The processor will check that the person is not located in a state or country in which betting is not permitted.

The processor may be configured to inspect external databases, for example police records, to confirm whether or not the user has a criminal record or if otherwise ineligible for using the system. If for any reason the user does not meet the requirements, the process ends in step 11 and a signal is sent to the user refusing their application.

If the application form is accepted, the processor transmits to the user confirmation that their application has been accepted in step 12. The processor may assign a password to the user or the user may be requested in step 13 to enter a password. In step 14, the user is requested to enter the password again, as a check. If it is correct, the password is entered in the user database along with the new user information in step 15 and use of the system may commence.

Figure 10 shows the steps involved when a registered user starts to use the system. In step 16, a logon screen is transmitted by the processor to the betting terminal upon request by the user. In step 17, the user completes the logon screen by entering the password and name and any other data requested. In step 18, the completed logon screen is transmitted to the processor for checking. In step 19, the processor checks the completed logon screen. In step 20, if information appears to be incorrect or missing, the processor will instruct the user to complete the logon screen again. The user may be given three attempts to logon correctly. If the user fails to logon correctly after three attempts, further attempts to logon from the given betting terminal may be prevented. In the alternative, in a manner not shown in Figure 10, the user may be given a chance to logon using a different logon screen which requires other information which will be known only to the user, for example a different password, confidential information such as the user's bank account number etc. This different logon screen, when completed, is checked by the processor in step 19 in the same way as the first logon screen.

If the logon information received by the first logon screen or by the second logon screen is correct, the user is permitted to use the system. The processor will transmit to the user information prompting the user to choose what action to take (step 21). For example, the user may be logged on to a webpage which presents the user with a number of choices. The user may select betting in step 22 which will be further described below. The user may select information services in step 23 which will be described further below. The user may select account management in step 24. If the user selects account management, the user may further select to view their account in step 25, to pay funds into their accounts in step 26 or to withdraw funds from their account in step 27.

Figure 11 is a schematic illustration of the steps involved to commence betting. In step 28, the user selects to start betting.

In step 29 the user may choose to view bets which have already been made. The user is also given the option of selecting betting by searching horses (step 30) or by searching races (30a).

In a first embodiment, the user is given an opportunity to create a database of horses which are of interest to the user. In step 31, the user enters a a part of a horse name as a search parameter and transmits it to the processor. For example, the user may enter the first three letters of the horses name. In step 32, the processor will, on receipt of the search request, search for the horse in the research database.

If in step 33, horses are located which match the search parameter entered by the user, a list of the horses located is sent to the user in step 34 to confirm or select which horse was intended. If, however, no horse can be located which matches the criteria, the processor sends a signal to the user instructing them to either enter the search parameter again or to cancel the search request.

The user may confirm in step 35 at least one horse from the horse data located by the processor. If no horse is located, the process returns to step 34 and the user is again prompted to enter a search parameter in step 36 or to cancel the search request. If the user confirms at least one horse from the horse data located by the search in step 35, a signal is sent to the processor which then records the selected horse in the user's list of horses of interest. The user may then proceed to step 37, in which the user instructs the processor to search for races in which the horse is running. If the user has already entered at least one horse in the user's list of horses of interest, the user may proceed directly to step 37 from step 30.

Figure 12 shows the steps involved in placing a bet on a horse by searching for the horse among current race data.

In step 38, the user selects to search among race data for a specific horse. In step 39, the user may select a horse to be searched and transmits the selection to the processor. In step 40, the processor searches the list of forthcoming races in the race database to see if the horse is running in any race. In step 42, if the horse is not located, the processor then sends an instruction to the user to enter a different horse name or to cancel the research request. If, however, the horse is found to be running in at least one race, data relating to the races in which the horse is running is sent to the user in step 43, together with a betting entry form which will be described further below. In step 45, the user completes the betting entry form and transmits it in step 46 to the processor. The processor will then check the betting entry form in step 48. The processor will do this by checking that the race selected is in the race database and that the horse selected is in the race database. The processor will then check that the type of bet has been entered correctly and that the appropriate number of horses and, if necessary, positions, have been entered for the horses as required by the type of bet. The processor will then check to ensure that betting rules have not been infringed. In particular, the processor will check to see if the user is permitted to place the type of bet identified in the bet entry form. The processor will check to ensure that entering the bet will not exceed the daily spend limit specified in the user database.

If the betting entry cannot be accepted, the processor instructs the user to change the betting entry if possible or to cancel the betting request. If the betting request is accepted, the processor will transmit a copy of the entry form back to the user to confirm in step 50. For example, it may appear as a pop-up window on the user's screen. If the user in step 51 does not confirm that the betting entry is correct, the processor may instruct the user to change the betting entry or to cancel the bet request (step 49). If the bet is accepted, the betting entry is entered into the bet database as an entered bet in step 52. In step 52a, the bet data is sent to the totalisator system.

Figure 13 schematically shows the steps involved in placing a bet by selecting races. In step 53, the user selects betting by races. In step 54, the user selects a day on which races may occur. In step 55, the processor transmits to the betting terminal of the user a list of races for the selected day, if any. The user may then in step 56 select a given race from the list of races and transmit the selection to the processor. In step 57, the

processor will inspect the race database for race data relating to the selected race and will transmit it to the user. The data may be transmitted in the form of or accompanied by an electronic betting entry form which will be described further below. In step 58. the user completes the betting entry form. In step 59, the user transmits the completed betting entry form to the processor using the betting terminal. In step 60. the processor checks the betting entry form. in the same way as step 47 of Figure 12. The process then continues through steps 61. 62. 63. 64. 65 and 66 which correspond to the steps 48. 49, 50. 51. 52 and 52a of Figure 12.

Figure 14 schematically shows the steps involved in completing the betting entry form. In step 67. the betting entry form is transmitted to the betting terminal of the user. In step 68. the user selects a bet type. For example. the betting entry form may be displayed as a web page on the betting terminal of the user. The web page may display a plurality of buttons. each corresponding to a given bet type. Alternatively. the system may scroll through a plurality of different bet types in turn as shown in Figure 14. For example. in step 69 the user selects whether to place a win/place bet. If a win/place bet is selected. the horse which is predicted to win is selected in step 70. In step 71, the user selects whether to place an exacta bet. If an exacta bet is selected. the user enters the first horse and the second horse in step 72 and 73 respectively. In step 74. the user decides whether to place a trifecta bet. If a trifecta bet is selected. the respective horses are selected in steps 75, 76 and 77. In step 78. the user decides whether to place a jackpot/placepot bet. If this type of bet is selected. the user selects the respective horses in steps 79-84 as shown. After the respective steps 70. 73, 77 or 84. depending upon the type of bet selected, the user enters the stake in step 85 and then transmits the bet to the processor in step 86.

Figure 15 is a schematic illustration of the process for transmitting live video of a race. In step 99, the video supplier starts to transmit video signals to the processor. The processor is configured to monitor the signals in step 100. The signals may be monitored for example by an operator of the system watching the video signals. At some point, the race will approach a stage at which betters will wish to view it. The operator then decides, subjectively, when to make video available for users to watch in

step 101. When this decision is made, the operator uses the switch device 310 or 311 shown in figure 3 to select the video screen of the appropriate race for screening. For this purpose, the switch may be provided by software such as PC Anywhere (trade mark). This switch enables the operator to send instructions to start transmission of video, to start recording of video, to stop transmission of video or to stop recording of video..

In step 102, on instructions of the operator, the video supplier is instructed by the processor to make the video screen available and to assign to the supply of live screen video signals a location address in a communication network 302.

The video supplier may also be instructed to record the video simultaneously, as will be explained further below

In step 104, the video supplier transmits the communications network locations address to the processor. In step 105, the processor enters the location address in a video database.

At some point, a user who has bet upon the race may wish to view a video of the race. In step 106, the user uses the betting terminal to transmit a video request to the processor. Before the processor permits the user to view the video, the processor will first check in the bet database to confirm that the user has placed a bet on the race identified by the video request. If no bet has been placed by the person making the request for a video on the race, video cannot be provided and the process ends in step 107. A signal is sent to the person making the request to indicate that the video will not be made available.

If, however, a bet has been placed by the person making the request and the betting data has been entered by the processor in the bet data store (step 107) the processor will permit the person making the request to view video of the race. In order to allow this to happen, the processor transmits code to the betting terminal. This code will comprise instructions for the betting terminal to perform a number of acts:

1. the code will activate means in the betting terminal automatically to allow the video to be viewed. For example, where the betting terminals comprises a personal computer, the code may open a window for viewing video, for example, a Realplayer or Mediaplayer (trade mark) window.

2. the code will include the location address on the communications network for the stream of live video signals from the video supply 304.

The code is preferably configured so that the betting terminal is enabled to view the video. The betting terminal is used to send a request to the location address for video stream automatically so that the video stream can be watched on the user terminal. Preferably, the video the supplier 304 is configured to apply a different location address to video for each race transmitted. In this way, when a betting terminal is provided with a location address for viewing video, the betting terminal can only be used to view one race and not any other races which may occur afterwards.

Termination of the video stream may occur by:

1. the user terminating the viewing process at the betting terminal
2. the stream of video from the video supplier 304 terminating, or
3 the supply of video being switched off by the switch 310 or 311 by the operator.

Video is normally terminated after all or some of the horses have completed the race (step 112).

Figure 17 is schematic illustration of the steps involved in viewing archived video.

As noted above in figure 16, the video supplier may be configured to record the live video data.

This archived video may be made available to users of the system of the invention as shown in figure 17. In step 113, a request to view archived video is received by the processor from a betting terminal.

However, as video footage of races is copyright material, it may not be made available to users unless those users have paid a licence fee. The processor is configured in step 114 to investigate if the user has paid a licence fee to view video archive.

The licence used in the present system is typically a blanket licence permitting the user to view any archived video within the period of the licence.

If the user does not have a licence, the processor will send to the betting terminal an electronic licence application form in step 115. The electronic licence application form will typically comprise a statement of undertaking by the user that they will not make the copyright material available to anybody else without the permission of the system operator and that it will only be used for home viewing and not for profit. Other undertakings may be provided as is required by contract with the supplier of the video material. In step 116, the user completes the licence application and transmits it in step 117 to the processor. In step 118, a licence fee is transmitted by the user to the processor. For example, this may be accomplished using the betting terminal by transmitting to the system account details and by transmitting to the financial institution 115 of the user an order to pay to the system the required sum for the licence purchased.

The licence purchased will have a time limit of may be one month, two months or a year. The fee paid will depend upon the duration of the licence.

The processor will check the licence application form and will confirm that the licence has been received in step 119. If this has been received, the licence details are entered in the video database.

After step 119 or, after step 114 if the user already has a licence, the processor is configured to send to the video supplier a request for video. The video supplier is configured to search the video storage 307 in step 121. If no video of the race requested by the user is present, a signal indicating that the video cannot be located is sent by the video supplier to the processor in step 123. In turn, the processor sends to the user a notification that the video cannot be located and requesting the user to re-enter the video data or cancel the request. If the video can be located, the archived video is allocated a

location address on the communications network 302 by the video supplier to make the archive video available for downloading. The location address is then transmitted to the processor.

The licence granted to the user to view archived material may be located in the processor. In the alternative, a licence system which is resident in the user's betting terminal may be used, for example using the software BRM (trade mark) designed for this purpose.

Using this software, a key is transmitted to the betting terminal. A key has a time limit. So long as the time limit has not expired, the key permits video file downloaded on the betting terminal to be viewed. If, however, the key has expired, the key will not permit the downloaded videos to be viewed. However, the key only needs to be sent once per term of licence purchased. In step 126, the process checks whether or not a key has already been sent to the betting terminals. If it has not, a data package comprising the location address and the key is transmitted to the betting terminal in step 127. If a key has already been transmitted, the processor only sends the location address of the archived video to be downloaded to the betting terminal in step 128.

In step 129, which follows on from step 127 or 128 as appropriate, the betting terminal, in response to receiving the location address from the processor automatically sends the request for archive video through the communication network 302 to the location address. As a result, a file comprising the archived video is downloaded over the communication network 302 to the betting terminal in step 130. The user of the betting terminal may then view the video file at any time during the period of the licence covered by the key.

The present invention has been described above purely by way of example and modification can be made within the spirit of the invention, which extends to equivalents of the features described and to method features of apparatus claims. The invention also consists in any individual features described or implicit herein or shown or implicit in the drawings or any combination of any such features or any generalisation of any such features or combinations.

CLAIMS:

1. An interactive race betting system comprising:

race data input means for receiving race data, the race data including an identification of at least one race and data relating to runners in the at least one race,

race data storage means,

means for transmitting race data to a betting terminal,

bet input means for receiving bet data from a betting terminal, the bet data including a selection of at least one race, a selection of at least one runner and an identification of the betting terminal,

bet data store means for storing the input bet data as a data entry,

means for receiving a request for video of at least one race from a requesting betting terminal,

a processor configured to inspect the bet data in the respective storage means when a request for video is received, and to give a signal if the at least one race is identified by at least one data entry in the bet data storage means which also identifies the requesting betting terminal and

means for allowing in response to the signal the requesting betting terminal to display video of the at least one race.

2. A race betting system according to claim 1, wherein the identification of the at least one race comprises an identification of a racecourse and an identification of a race time.

3. A race betting system according to claim 1 or 2, wherein the race status data includes an estimate of the time which will elapse before the race start.

4. A race betting system according to claim 3, wherein the processor is configured to inspect the bet data store when the time to the start of at least one race is less than or equal to a defined time.

5. A race betting system according to any preceding claim, further comprising account management means, comprising account data storage means for storing account data comprising, for each of a set of defined users, at least an account balance.

6. A race betting system according to claim 5, wherein the account management means is configured to reduce the account balance of a user in response to betting data received from a betting terminal operated by the user.

7. A race betting system according to claim 5 or 6, wherein the bet data further comprises an identification of a stake for a bet, the account management means being configured to reduce the account balance for the user by the stake in response to betting data received from a betting terminal operated by the user.

8. A race betting system according to claim 5, 6 or 7, wherein the bet data further includes an identification of the type of bet, the account management means being configured to reduce the account for the user by an amount corresponding to the type of bet in response to betting data received from a betting terminal operated by the user.

9. A race betting system according to any of claims 5 to 8, wherein the processor is configured to transmit to at least one totalisator device bet data corresponding to the race selection and runner selection of a data entry and reference data, the processor being further configured to record the reference data in the data entry in the bet data store.

10. A race betting system according to claim 9, wherein the processor is further configured to receive from a totalistator device race result data, including an identification of a race, and an identification of at least one sum won, the identification of the sum won being accompanied by reference data, the processor being configured to search the bet data store to identify the bet data entry with the same reference data and to operate the account management means to credit the account of the user of the betting terminal identified by the betting data entry with a sum corresponding to the sum won.

11. A race betting system according to any preceding claim, wherein the bet data includes an identification of the type of bet.

12. A race betting system according to claim 11, wherein the type of bet is win or place bet.

13. A race betting system according to claim 11, wherein the bet type is an exacta bet, the bet data further comprising identification of a second runner.

14. A race betting system according to claim 11, wherein the bet type is a trifecta bet and the bet data further comprises an identification of a second and third runner.

15. A race betting system according to claim 11, wherein the bet type is a jackpot / placepot bet and the bet data comprises an identification of a plurality of runners in a specified order.

16. A race betting system according to any of claims 11to 15, wherein the processor is configured to record the type of bet in the bet store.

17. race betting system according to any preceding claim, wherein the processor is configured to record the stake in the bet data store.

18. A race betting system according to any preceding claim, wherein the processor is configured to inspect input bet data to check for a password, the processor being configured to reject the bet data if the password is absent or incorrect.

19. A race betting system according to any preceding claim, wherein code is transmitted to the betting terminal is configured to allow the terminal to receive video of the race from the processor, the processor being configured to transmit video of the race to the betting terminal.

20. A race betting system according to any preceding claim, further comprising an archive data store comprising archive data relating to at least one of the runner, race, racecourse, race results, trainer or rider

input means for receiving a search request from a betting terminal, the processor being configured to search for data in the archive in response to the search request to produce search result data, and

means for transmitting search result data to the betting terminal

21. A race betting system according to any preceding claim, further comprising means for receiving from a betting terminal option data relating to at least one of a runner, race, racecourse, trainer or rider,

an option data store for storing the option data received as a data entry, the process or being configured to inspect the race data store at regular intervals and the option data store and to produce option match data if the data in any data entry matches race data in the race data store, and

means for transmitting to the betting terminal identified by the option data entry the option match data, comprising data relating to the race.

22. A race betting system according to any preceding claim, further comprising means for transmitting a request for video location data to a video data source, means for receiving from the video data source video location data and a video location data store for storing the video location data.

23. A race betting system according to claim 23, wherein, when a request to view a selected race is received from a betting terminal, the processor is configured to search in the video location data store for video location data relating to the selected race and, in order to allow the betting terminal to display video of the selected race, the processor is configured to transmit to the betting terminal the video location data.

24. A race betting system according to any preceding claim, further comprising means for receiving from a requesting betting terminal a request for archived video of a race which has finished, a betting terminal licence data store in which betting terminals which have licences to receive archived videos are entered, the processor being configured to search the betting terminal licence data store and, if the requesting betting terminal has a licence, to permit the requesting betting terminal to access archived video.

25. A race betting system according to claim 24, wherein the processor is configured to transmit to the requesting betting terminal code which allows the betting terminal to display archived race video for a specified period of time.

26. A race betting system according to any preceding claim, further comprising means for transmitting a request for archived video location data to an archive video data source, means for receiving from the archive video data source video location data and a video location data store for storing the archive video location data.

27. A race betting system according to claim 26, wherein, when a request to view an archived race is received from a betting terminal, the processor is configured to search in the archived video location data store for archived video location data relating to the archived race and, in order to allow the betting terminal to display video of the archived race, the processor is configured to transmit to the betting terminal the archived video location data.

28. A betting terminal for use with the betting system of any preceding claim, comprising input means for receiving race data from the system, bet data input means for inputting bat data, bet data transmitting means for transmitting the bet data to the system, means for transmitting to the system a request to view a race and means for viewing the race when allowed by the system.

29. A betting terminal according to claim 28, further comprising means for transmitting to the system payment instructions.

30. A betting terminal according to claim 28 or 29, wherein the means for viewing the race comprises means for receiving from the system video location data and means for transmitting a request to the location identified by the video location data a request to view video data and means for receiving from the location the video data.

31. An interactive race betting system comprising:

race data input means for receiving race data, the race data including an identification of at least one race and data relating to runners in the at least one race, the racecourse, trainer or rider,

race data storage means,

means for receiving from a betting terminal option data relating to at least one of a runner, race, racecourse, trainer or rider,

an option data store for storing the option data received as a data entry.

a processor configured to inspect the race data store at regular intervals and the option data store and, if data in the race data store matches data in an entry in the option data store, to transmit to the betting terminal identified by the option data entry, the race data of the data entry, and

bet input means for receiving bet data from the betting terminal.

32. An interactive race betting system comprising:

race data input means for receiving race data, the race data including an identification of at least one race and data relating to runners in the at least one race,

race data storage means,

means for transmitting race data to a betting terminal,

bet input means for receiving bet data from a betting terminal, the bet data including a selection of at least one race and a selection of at least one runner

bet data store means for storing the input bet data as a data entry,

means for transmitting a request for race video location data to a video data source, means for receiving from the video data source the race video location data and a video location data store for storing the race video location data

means for receiving a request for video of at least one race from a requesting betting terminal,

a processor configured to search in the race video location data store for video location data relating to the selected race and, in order to allow the betting terminal to display video of the selected race, to transmit to the betting terminal the video location data.

33. A method of interactive race betting, comprising receiving race data, the race data including an identification of at least one race, the status of the race and data relating to runners in the race,

transmitting race data to a remote betting terminal, receiving betting data from a betting terminal, the bet data including a selection of at least one race and at least one runner in the race and an identification of the betting terminal, storing the bet data in a bet data store as a data entry, receiving a request for video from a requesting betting terminal, inspecting the bet data store when a request is received, giving a signal if the at least one race is identified by at least one data entry in the bet data store means,

which also identifies the requesting betting terminal and allowing in response to the signal the requesting betting terminal to display a video of the at least one race.

34. Programme code for controlling one or more processors to implement the method of Claim 33.

35. a carrier medium carrying the computer programme code according to the invention.

INVESTOR IN PEOPLE

Application No: GB 0129601.1
Claims searched: All

Examiner: Phil Osman
Date of search: 29 August 2002

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.T): -

Int Cl (Ed.7): G06F 17/60, G07F 17/32

Other: Online: EPODOC, Internet, JAPIO, WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	WO 00/25876 A1	(RACETECH) See page 3 line 1 - page 4 line 23.	1-3, 31-35
X	US 6,004,211	(O.D.S. TECHNOLOGIES) See column 2 line 33 - column 3 line 30.	1-3, 31-35
X	US 5,746,657	(UENO) See Abstract.	1-3, 31-35

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
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